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EVALUATION OF ARIZONA'S HEALTH CARE COST CONTAINMENT SYSTEM DEMONSTRATION

THIRD IMPLEMENTATION AND OPERATION REPORT

October 1993

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ACKNOWLEDGEMENTS

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

ABC	Adjusted Billed Charges
ADHS	Arizona Department of Health Services
ADP	Automated Data Processing
ADL	Activity of Daily Living
AFDC	Aid to Families with Dependent Children
AFDCUP	Aid to Families with Dependant Children of Unemployed Parents
AHCCCS	Arizona Health Care Cost Containment System
AHCCCSA	Arizona Health Care Cost Containment System Administration
AHC	Arizona Health Concepts
AHCPR	Agency for Health Care Policy and Research
AIDS	Acquired Immune Deficiency Syndrome
ALTCS	Arizona Long-Term Care System
APD	Advanced Planning Document
APIPA	Arizona Physicians Independent Physicians' Association
ASCAR	Arizona Standardized Case Management Assessment Review
ASSIST	Arizona Social Services Information and Statistical Tracking System
CAP	Comprehensive AHCCCS Plan
CATS	Client Assessment and Tracking System
CFR	Code of Federal Regulations
CMP	Children's Medical Program
CPI	Consumer Price Index
CSDP	Comprehensive Service Delivery Plan
DBFR	Division of Business, Finance, and Research
DDD	Division of Developmental Disabilities
DES	State Department of Economic Security
DES/DDD	Department of Economic Security/Division of Developmentally Disabled
DHS	Department of Health Services
DMS	Division of Member Services
DOA	Department of Administration
DSH	Disproportionate Share Hospital
EAC	Eligible Assistance Children

ELIC	Eligible Low Income Children
EPD	Elderly and Physically Disabled
EPSDT	Early and Periodic Screening, Diagnosis and Treatment
FFP	Federal Financial Participation
FFS	Fee-For-Service
FHPNA	Family Health Plan of Northeastern Arizona
FMAP	Federal Medical Assistance Percentage
FTE	Full-time equivalent
FY	Fiscal Year (October 1, 19XX - September 30, 19XX+1)
GSD	General System Design
HCB	Home and Community-Based
HCBS	Home and Community-Based Services
HCFA	Health Care Financing Administration
HMA	Health Management Associates
HMO	Health Maintenance Organization
IADL	Instrumental Activities of Daily Living
IBNR	Incurred But Not Reported
ICAP	Inventory for Client and Agency Planning
ICF	Intermediate Care Facility
ICF/MR	Intermediate Care Facility for the Mentally Retarded
IGA	Intergovernment Agreement
IHS	Indian Health Services
INC	Information Network Corporation
IPA	Independent Practice Association
IRMD	Information Resources Management Division
ISD	Income Support Division
ISP	Individual Service Plan
IV	Intravenous
LEDS	Long-Term Care Eligibility Determination Subsystem
LPN	(undefined)
LTC	Long-Term Care
MCE	Medical Care Evaluation
MCP	Mercy Care Plan
MFIS	Member File Integrity Section
MI	Medically Indigent

MIS	Management Information System
MMIS	Medicaid Management Information System
MN	Medically Needy
MR/DD	Mentally Retarded/Developmentally Disabled
NAFHP	Northern Arizona Family Health Plan
NMES	National Medical Expenditure Survey
OBRA	Omnibus Budget Reconciliation Act
ORD	Office of Research and Demonstration
PAS	Preadmission Screening
PASARR	Preadmission Screening and Annual Resident Review
PCP	Primary Care Physician
PHS	Pima Health System
PMMIS	Prepaid Medicaid Management Information System
QA	Quality Assurance
QA/UR	Quality Assurance and Utilization Review
QMB	Qualified Medicare Beneficiary
RAHP	Regional AHCCCS Health Plan
RBHA	Regional Behavioral Health Associations
RBRVS	Resource Based Relative Value Scale
RFP	Request For Proposal
RN	Registered Nurse
RVU	Relative Value Unit
SCAN	Senior Care Action Network
scu	System Control Unit
SFY	State Fiscal Year (July 1, 19XX - June 30, 19XX+1)
S/HMO	Social/Health Maintenance Organization
SMI	Seriously Mentally Ill
SNF	Skilled Nursing Facility
SOBRA	Sixth Omnibus Budget Reconciliation Act
SPA	State Plan Amendment
SSA	Social Security Administration
SSI	Supplemental Security Income
SSR	System Service Request
S/URS	Surveillance and Utilization Review Subsystem
TPL	Third Party Liabilities

UR	Utilization Review
UR/QA	Utilization Review/Quality Assurance
VHS	Ventana Health Systems

EXECUTIVE SUMMARY

Introduction

This report describes the implementation and operation of the Arizona Health Care Cost Containment System (AHCCCS) for the period October 1991 through December 1992. It is the third Implementation and Operation Report produced under Health Care Financing Administration (HCFA) Contract #500-89-0067. Below we provide a brief description of the AHCCCS program, followed by a summary of findings on each of five implementation and operation issues. Implementation and operation issues discussed are: effectiveness of program contractors, method of setting capitation payments, preadmission screening, level of care determination and use of home and community-based services (HCBS), cost of administering the program, and information systems.

The AHCCCS Program

AHCCCS provided medical services to approximately 450 thousand indigent persons in Arizona in January 1993. The only state without a traditional Medicaid program, Arizona receives federal funding for AHCCCS as a HCFA demonstration project. AHCCCS differs from other states' indigent health care programs in that it capitates acute care plans and long-term care contractors to provide medical care services to eligible beneficiaries. As of January 1993, there were fourteen acute care plans providing services to approximately 386 thousand enrolled beneficiaries, and seven long-term care contractors providing services to over 16 thousand enrolled long-term care beneficiaries. The remaining eligibles are enrolled with the Indian Health Service or receive services from AHCCCS directly.

Although the acute care part of the AHCCCS program has been in existence since October 1982, the long-term care component, called the Arizona Long-Term Care System (ALTCS), did not come into existence until December 1988 for the mentally retarded/developmentally disabled (MR/DD) and January 1989 for the elderly and physically disabled (EPD). Long-term care services during that period were not part of the AHCCCS program, but provided by separate county systems.

Eligibility for the acute care program includes Aid to Families with Dependent Children (AFDC) recipients, Supplemental Security Income (SSI) recipients, the medically indigent (MI) and the medically needy (MN), and other special eligibility groups. AHCCCS acute care plans cover almost all traditional Medicaid outpatient and inpatient services, as well as skilled nursing facility (SNF) and intermediate care facility (ICF) services for short-term (less than 90 days) institutional care. Coverage for mental health services is being phased into the program.

Eligibility for ALTCS includes both a financial and functional screen. Categorical Medicaid recipients, AFDC and SSI recipients are automatically financially eligible. In addition, financial eligibility is extended to those with incomes up to 300% of SSI. Those between 100% and 300% of SSI are subject to cost-sharing depending on their income and assets. The functional screen is a preadmission screening instrument (PAS) administered by the state that is designed to target beneficiaries who are at immediate risk of institutionalization. Benefits covered under ALTCS include acute care services as well as nursing home and HCB services.

HCB services covered by ALTCS include home health care, homemaker services, personal care, adult day health, hospice, respite care, transportation, and home delivered meals. Habitation and day-care services are also covered for the developmentally disabled. A program waiver to permit family member attendant care was received in June 1991. Although HCB services are covered, there is a cap on the HCBS use for EPD beneficiaries. It was originally specified as five percent of total expenditures which was translated by AHCCCS into ten percent of enrollees. During fiscal year (FY)

1993 (October 1992 - September 1993) the limit was 30% of all enrollees for all program contractors.

The total budget for the AHCCCS program was estimated to be $1.4 billion in state fiscal year (SFY) 1993 (July 1992 - June 1993). It has increased dramatically over the last six fiscal years rising from $387 million in SFY 88. The ALTCS SFY 93 budget for medical service costs was $264 million. The AHCCCS program is jointly funded by the federal government, the state of Arizona, and the Arizona counties. The federal government was expected to finance 56% of SFY 93 expenditures. The state was expected to finance 32%, while the remaining 12% was to be funded by the counties.

Acute care capitation payments were approximately 56% of SFY 93 budgeted expenditures, ALTCS medical services are 19%, fee-for-service payments are nine percent, and administration is seven percent. Expenditures for mental health, deferred liability reinsurance, children's rehabilitation, Medicare premiums, and Qualified Medicare Beneficiaries (QMBs), make up the remainder of the budget.

AHCCCS has a number of activities in place to monitor quality assurance in the program in general and among acute care plans and long-term care contractors. AHCCCS requires quarterly quality assurance reports from the plans and contractors and conducts medical audits. Plans and contractors are responsible for having quality assurance and utilization review programs in place. A grievance and appeals process is also in place to adjudicate disputes involving AHCCCS members and providers. Member grievances include both those connected with eligibility determination and with services. Grievances related to services must first be submitted to the AHCCCS plan or contractor. Members dissatisfied with a grievance decision can appeal to AHCCCS.

Federal oversight for the AHCCCS program rests with HCFA. Both HCFA Region IX in San Francisco and the Central Office in Baltimore have responsibilities concerning oversight of the AHCCCS program. The Central Office's responsibilities have been concerned with ensuring compliance with

the Social Security Act 1115 waivers that allow AHCCCS to receive federal Medicaid appropriations as a demonstration project. The San Francisco Regional Office monitors the ongoing operation of the program having responsibility for reviewing the federal reimbursements to AHCCCS and monitoring ongoing program implementation.

Effectiveness of Program Contractors

Program contractors are central to the ALTCS program. These contractors receive prepaid capitation payments in return for assuming responsibility for the provision of acute and long-term care services to ALTCS eligibles. For the program to be successful, program contractors throughout the state need to develop effective subcontracting processes that enable them to identify efficient methods of delivering care and negotiate advantageous contract rates with providers.

AHCCCS has demonstrated its ability to contract for the provision of services to ALTCS eligibles under a prepaid, capitated system. As of the fifth year of the program, all but two (Apache and Santa Cruz) of Arizona's 15 counties were served by an EPD program contractor. ALTCS eligibles in Maricopa, Pima, and Pinal counties were served by county entities (Maricopa and Pima are required by law to participate). Private entities successfully bid for the right to provide services to long-term care beneficiaries in the remaining ten counties. The Department of Economic Security (DES) provides services to the MR/DD population throughout the state.

The primary role of an ALTCS contractor is to arrange for the provision of services to ALTCS eligibles. Contractors are responsible for developing delivery systems that are capable of delivering all covered LTC and acute care services to enrollees in their counties. As the program has matured, there have been improvements in the comprehensiveness of HCB provider networks. Limited HCB service availability was still reported in most rural counties, however. Given low population densities and transportation constraints, it

may not always be appropriate or cost effective to require that rural program contractors offer a full range of HCB services.

For the program contractor model to be effective, the contractors must adopt approaches that are consistent with a managed care environment. Contractors appear to be doing this in the area of provider reimbursement. Implementation of competitive, managed care approaches to pay providers is apparent throughout the program. For example, most contractors have set up capitation arrangements with the majority of their primary care physicians.

Although there has been an investment in administrative systems, some of the ALTCS contractors may not be devoting enough resources in this area for a capitated delivery system. In allocating resources, contractors must strike a balance between service delivery and administrative investments. A good data system is especially critical for assuring that services are delivered appropriately and cost effectively. The contractors' experiences in this area are mixed; some of the contractors have developed very sophisticated information systems that are capable of producing timely and accurate information, but others have been substantially less successful. DES, in particular, may need to focus more resources on its infrastructure development, especially as concerns development of an effective information system.

In designing programs of this nature, attention should be given to the relationships that exist between the participating entities. The relationship between AHCCCSA and DES, two state agencies of equal status, differs from that between AHCCCSA and the EPD contractors. The complexity of the interactions that have existed between AHCCCSA and DES illustrates the importance of being concerned about defining effective channels of communication and responsibility.

Method of Setting the Capitation Payments

One of the most important considerations in a health care program is the methodology employed to pay for services. Arizona does this through a system which shares risk with its EPD contractors and passes the HCFA payment directly to DES, the statewide MR/DD contractor. The HCFA payment for DES beneficiaries was originally negotiated as an interim payment. This amount was supposed to be reconciled with actual DES costs and a new capitation payment determined. However, the DES cost audit on which reconciliation could be based, originally scheduled for completion in January 1990, was not completed by DES until October 1992. Thus, capitation payments to DES for the first four years of the program were based on these initial rates. Results of the DES cost audit indicated that ALTCS revenues exceeded expenditures by 2.5% in FY 89, but experienced a 4.1% shortfall in FY 90 and a 4.3% shortfall in FY 91. The FY 91 shortfall was calculated using interim reimbursement rates and thus will likely be adjusted when reconciliation with HCFA is completed. DES reported administrative costs of 26% of revenues in FY 89 and 19% in FY 90 and FY 91. The current DES capitation for FY 93 is $2,511.87 per month.

AHCCCS prospectively determines the EPD contractor rates through a method largely driven by actual costs. They can, however, negotiate with these EPD contractors on the amount contractors pay long-term care providers as well as on the amounts of the allowances (case management, administration, etc.). Monthly rates set for FY 93 varied by contractor from $1,863.26 for Ventana Health Systems (VHS) to $2,060.77 for Pima Health System (PHS).

ALTCS EPD contractors' financial reports for FY 91 showed excesses of revenue over expenditures for all EPD contractors except for PHS. Per member per month net income averaged $22.25, and ranged from a negative net income of $147.99 for PHS to a positive net income of $235.73 for Comprehensive AHCCCS Plan (CAP).

The ALTCS capitation experience raises two areas of importance. First, dealing with other state agencies and county organizations present unique challenges with regard to responsibility for management and enforcement. The

ALTCS experience suggests that early attention needs to be given to forging relationships with clearly defined roles and responsibilities to do this effectively. Second, the capitation methodology used under AHCCCS to reimburse long-term care contractors for acute and long-term care services has evolved over time from one based on many reconciliations to one subject to less retrospective reconciliation.

PAS, Level of Care Determination, and the Use of HCB Services

This chapter describes the MR/DD program's approach to level of care determination and the cost-effectiveness of its HCB services. Our research suggests that Arizona's ability to serve 97 percent of its MR/DD population in non-ICF/MR settings is attributable to state deinstitutionalization policy that preceded AHCCCS and ALTCS. Policies and practices adopted by the ALTCS program and the Department of Economic Security, the program contractor for the MR/DD population, appear to be an extension of this pre-ALTCS policy. As an example, DES staff estimate that there have been only ten ICF/MR admissions since ALTCS began.

A wide array of home care services and non-ICF/MR placement settings allow DES to care for their clients in settings less restrictive than ICF/MRs. Settings include foster homes, adult development homes, and group homes. As of October 1992, DES served 208 clients in ICF/MRs and 5,808 in other settings. Most of the 208 ICF/MR residents were in residence when ALTCS began.

A prospective payment system for approximately 34 large DES providers instituted October 1, 1992 may have some implications for case mix and level of care determination. This payment methodology pays a different rate to each provider, but the rate is uniform across all the provider's settings of a given service type regardless of clients' disability. Previously, payment reflected actual level of need. Now, providers are placed at risk for meeting client needs at a fixed per capita payment rate.

It appears that ALTCS clients served in HCB services settings come from a population that in many other states would be served in ICF/MRs. Analysis of clients' level of dependence, degree of retardation, and medical needs suggest that ALTCS is serving a predominately severely dependent MR/DD population.

In addition, it appears that ALTCS is serving its MR/DD population on a cost-effective basis. We examined the three-year cost-effectiveness of the MR/DD HCB services program by comparing the actual cost of providing ICF/MR and HCB care to the expected cost of ICF/MR care if HCB services were not available and for individuals already receiving ICF/MR services. To be cost effective, actual costs must be less than or equal to expected costs. Expected costs were calculated by multiplying the number of clients who would have been institutionalized in the absence of HCB services by their lengths of stay in an ICF/MR (expected to equal their lengths of stay in HCBS) by the cost of ICF/MR care. We developed a logistic regression model of the risk of institutionalization and applied the coefficients to each MR/DD HCBS client. Results suggest that ALTCS' MR/DD HCB services program is cost-effective.

Cost of Administering the Program

Program costs include both the costs of providing medical services and the costs of administering the program. In the ALTCS program, there are two kinds of administrative costs to consider: the administrative costs of the program itself, and the administrative costs of the program contractors.

Determining the appropriate level of administrative cost is not easy, especially in a program such as ALTCS, which has a number of features designed to control overall medical service use that may result in larger administrative costs. These features include preadmission screening, case management, use of contractors and competitive bidding/selective contracting. Thus, a comparison of the percentage of total costs that are due to administration must of necessity consider the differences in the structures of the programs being compared.

Administrative costs as a percentage of total program costs (medical service costs plus administrative costs) were 20.6% of medical service costs in FV 89, 17.0% in FV 90, and 14.3% in FV 91. These figures include both costs for EPD and MR/DD beneficiaries for the ALTCS program itself and for the ALTCS contractors. These percentages are greater than those experienced by traditional Medicaid programs, by the long-term care programs in Arizona before ALTCS, and by most HMOs with Medicare risk contracts. However, these comparison groups do not provide the level of case management which exists in the ALTCS program. In comparison with long-term care demonstration projects such as the S/HMOs and the Channeling Demonstration, which provide more extensive case management, ALTCS generally had a smaller percentage of total cost attributable to administration.

Administrative costs differ substantially by whether the contractor is one of the EPD contractors or the MR/DD contractor (DES). Administrative costs per member per month for the EPD contractors were $120.58 per member per month in FV 89, $128.06 in FV 90, and $161.12 in FV 91. DES comparative cost data were $750.69 per member per month administrative costs in FV 89, $499.50 in FV 90, and $361.89 in FV 91. Some of this may be due to the greater percentage of DES clients in home care, some may be due to cost allocation methods employed to allocate administrative costs to ALTCS, but some may be the product of less efficient delivery of care.

Over the first three years of ALTCS, the percentage of total administrative costs consumed by the ALTCS administration has decreased. In FV 89 58% of the total administrative costs incurred are by the program and 42% by the program contractors. In FV 90, the ALTCS percentage was 48% by the program and 52% by the contractors. By FV 91, ALTCS administrative costs were 35% of the total administrative costs and the contractors' administrative costs 65%. Major administrative costs of the program include the costs for determining eligibility and for providing management information system (MIS) support. At the contractor level, case management expenses make up approximately 30% of the program contractors administrative costs averaging $48.50 per member per month in FV 91.

Other states setting up a contractor system need to determine the basis for contractor payment for administration and to define appropriate reporting requirements. In ALTCS, contractors are paid a fixed dollar amount per enrollee for case management services. Other contractor administrative costs are reimbursed as a fixed percentage of the capitation payments. Monitoring of program administrative costs requires specification of uniform reporting from contractors and close monitoring of compliance.

Information Systems

In the first half of 1991, AHCCCS implemented its Prepaid Medicaid Management Information System (PMMIS), after a five-year development effort. Prior to the implementation of this new system, AHCCCS had been using a Medicaid Management Information System (MMIS) which was originally designed to support a fee-for-service Medicaid program. The PMMIS development effort was an extremely ambitious undertaking which produced the first-ever comprehensive MIS to support a prepaid Medicaid program. The system was also the first-ever MMIS development using the latest relational database technology. Both of these factors undoubtedly contributed to an unexpectedly high development cost and lengthy development timeframe.

The major focus of the analysis presented in this report is on the cost-effectiveness of the PMMIS. On the positive side, the system is viewed very favorably by internal AHCCCS users, and it has been well received by the health plans. The system is clearly successful in providing substantial day-to-day support for operations and decision-making in the AHCCCS program. However, many of the anticipated financial, or tangible, benefits have not been realized, and none have been quantified. Further, the PMMIS was very expensive to develop and it is a very expensive system to operate and maintain. The development cost of $29.5 million and the development time of five years were considerable greater than originally anticipated. The annualized operational costs of 516.4 million are significantly more than expected, significantly more than the old MMIS, and significantly more than the MMIS costs in comparable states (expressed either as cost per member month

or cost per medical assistance dollar). Given a strict quantitative analysis, one must conclude that the system has not yet shown itself to be cost-effective.

However, a broader view of cost-effectiveness must take into account the very significant "intangible" benefits of the PMMIS, including its role as the key infrastructure supporting the operation of AHCCCS, the ready access it provides to critical program information, and its positive perception by AHCCCS users, who increasingly view the system as being indispensable to their effectiveness in their jobs. Taking this broader perspective, the system may well be cost-effective, although this cannot be demonstrated quantitatively at this stage.

While the PMMIS may well be cost-effective in a broad sense, there remains the question of whether the same, or most of the same, benefits could have been achieved for a smaller development cost, and/or a smaller operational cost. The implementation of the relational database technology has undoubtedly played a major role in the ability of the PMMIS to serve internal user needs, especially in terms of providing ready access to program information and providing flexibility to accommodate program changes. However, one must also wonder whether the new technology is a prime driver of the PMMIS costs that significantly exceed those of other states. If so, then states will need to address the question of whether a step up in MMIS cost is a price they are willing to pay for what may be a more effective MMIS using the latest technology.

1. INTRODUCTION

This report is the Third Implementation and Operation Report for the "Evaluation of the Arizona Health Care Cost Containment System Demonstration." This evaluation is being conducted under contract #500-89-0067 from the Health Care Financing Administration (HCFA) to Laguna Research Associates (LRA) of San Francisco, California. The evaluation team also includes Actuarial Research Corporation (ARC) of Annandale, Virginia; Lovelace Medical Foundation of Albuquerque, New Mexico; and University of Michigan of Ann Arbor, Michigan.

This document reports on program implementation and operation issues focusing on the time period from October 1991 through December 1992. In this introduction we will first briefly describe the Arizona Health Care Cost Containment System (AHCCCS), Arizona's alternative Medicaid program which has provided acute care services to the indigent in Arizona since October 1982. Since January 1989 [December 1988 for mentally retarded/developmentally disabled (MR/DD) beneficiaries], it has contracted on a capitated basis with public and private long-term care contractors to provide acute, home and community-based (HCB), and institutional services to eligible beneficiaries. Following the description of AHCCCS, we will describe the implementation and operation issues to be covered in this report and the report's organization.

Arizona Health Care Cost Containment System

AHCCCS is an innovative system for providing medical care services to over 457,000 indigent persons in Arizona. The only state without a traditional Medicaid program, Arizona receives federal funding for AHCCCS as a HCFA demonstration project. AHCCCS differs from other states' indigent health care programs in that it contracts with acute care plans and long-term care contractors to provide medical care services and reimburses them under a

prepaid capitated system. As of January 1, 1993, 14 capitated acute care plans provide services to approximately 435,000 enrolled beneficiaries in 13 counties. Seven long-term care contractors provided medical care services to over 16,000 enrolled beneficiaries. Two counties, Apache and Santa Cruz, did not have a long-term care contractor.

Under the acute care program, beneficiaries select or are assigned to a primary care "gatekeeper" who manages their care. Beneficiaries are required to pay minimal copayments for some of the services they receive. Eligibility for acute care includes Aid to Families with Dependent Children (AFDC) recipients, Supplemental Security Income (SSI) recipients, the medically indigent (MI) and medically needy (MN), and other special eligibility groups [Eligible Low Income Children (ELIC), Eligible Assistance Children (EAC), Children's Medical Program (CMP), and Sixth Omnibus Budget Reconciliation Act Eligibles (SOBRA)]. Services include most traditional Medicaid outpatient and inpatient services. AHCCCS acute care plans also cover skilled nursing facility (SNF) and intermediate care facility (ICF) services for short-term institutional care (i.e., less than 90 days).

The Arizona Long-Term Care System (ALTCS), an expansion of AHCCCS to cover acute and long-term care services for long-term care beneficiaries, became operational on December 19, 1988 for the MR/DD population, and on January 1, 1989 for the elderly and physically disabled (EPD) population. Long-term care services include both nursing home services and home and community-based services. There is one contractor for EPD beneficiaries per county. The Arizona Department of Economic Security (DES) handles all MR/DD beneficiaries statewide. There were 10,401 ALTCS EPD beneficiaries and 6,208 ALTCS MR/DD beneficiaries as of January 1, 1993.

ALTCS EPD beneficiaries are assigned according to their county of residence to one of six contractors. The six contractors are Maricopa County Long-Term Care (Maricopa LTC), Pima Health System (PHS), Ventana Health Systems (VHS), Arizona Physicians Independent Physicians' Association (APIPA LTC), Pinal County Long-Term Care (Pinal LTC), and Comprehensive AHCCCS Plan (CAP). Two rural counties do not have a contractor and their beneficiaries

are handled by AHCCCS. In fiscal year (FY) 1993 EPD contractors are paid a monthly capitated amount for their enrollees which range from $1,777 to $2,063. DES is paid the federal share of the $2,512 monthly capitation rate for each MR/DD eligible.

ALTCS eligibility requires both a financial and functional assessment. AFDC and SSI Medicaid recipients are automatically financially eligible. In addition, ALTCS extends eligibility to those with gross incomes less than 300 percent of SSI. The need for long-term care services is assessed using a preadmission screening (PAS) instrument. The PAS is designed to identify those beneficiaries who are at immediate risk of institutionalization.

The total budget for the AHCCCS program (including both the AHCCCS acute care program and ALTCS) is $1.4 billion in state fiscal year (SFY) 1993. The program is jointly funded by the federal government, the state of Arizona, and the counties, with over half of the revenues projected to come from the federal government in SFY 93. More than half of the revenues are budgeted for acute care capitation payments, with nearly one-fifth of the expenditures budgeted for ALTCS medical services. Fee-for-service payments are budgeted at nine percent and administration at seven percent.

The Implementation and Operation Issues

In the next chapter, we give a more detailed overview of the AHCCCS program. It includes a discussion of its administration, covered services, eligibility, health care plans and contractors, changes in payment methodology for fee-for-service providers, revenue and expenditures, integration of mental health services, quality assurance, and oversight activities. Following that, we discuss five implementation issues in this report. These issues are:

- Effectiveness of Program Contractors.
- Method of Setting the Capitation Payment.
- Preadmission Screening, level of Care Determination, and the Use of Home and Community-Based Services.

- Cost of Administering the Program.
- Usefulness of the Management Information System.

In each of the issue chapters, we will first introduce the issue, including a description of the data sources used for the investigation, then we present the major evaluation issues and findings, and finally, we discuss the policy implications of the findings.

2. OVERVIEW OF DEVELOPMENTS IN AHCCCS

Introduction

This chapter provides an overview of developments in the Arizona Health Care Cost Containment System (AHCCCS) program since October 1991. It includes discussions of: the organization of the administrative structure, service coverage under the acute care and the long-term care (LTC) programs, current eligibles and trends in eligibility, participating acute care plans and LTC program contractors, the major categories of revenue and expenditures for AHCCCS, quality assurance activities, change in reimbursement methods for fee-for-service (FFS) providers, integration of mental health services into AHCCCS, and federal oversight of the AHCCCS demonstration.

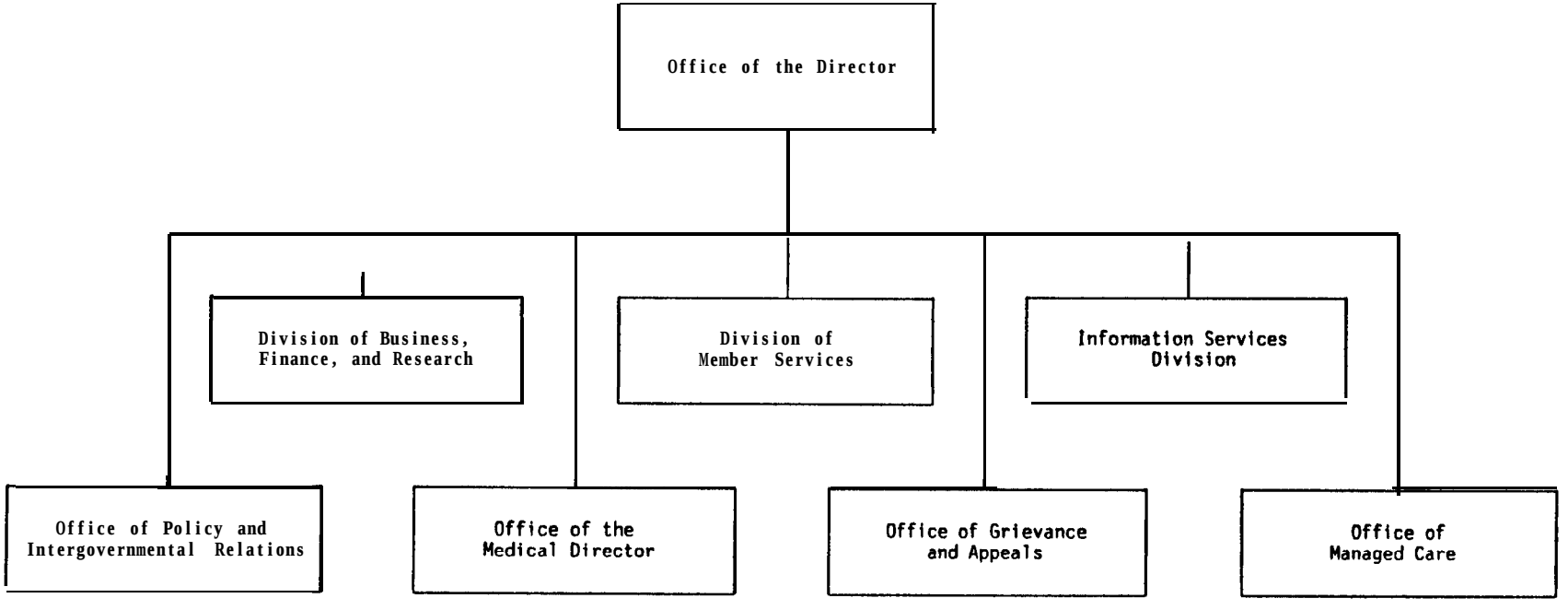
The Arizona Long-Term Care System (ALTCS) is administered by the AHCCCS Administration (AHCCCSA), but is operated as a separate program from the AHCCCS acute care program. Throughout this report "AHCCCS" is often used to refer to the overall AHCCCS program, which includes both the AHCCCS acute care program and ALTCS. References specifically to the AHCCCS acute care program will be indicated. The ALTCS program was implemented during Year 7 of the AHCCCS program. Fiscal years, AHCCCS years, and ALTCS years are defined in Appendix A.

Administration

The current AHCCCS organization chart is shown in Figure 2-1. The administration consists of three divisions and four offices. The names of the directors of each of the AHCCCS offices and divisions are given in Table 2-1.

Figure 2-1

AHCCCS ORGANIZATION CHART
AS OF JANUARY 1, 1993



Source: AHCCCS Office of Policy and Intergovernmental Relations.

Table 2-1

AHCCCS OFFICE AND DIVISION DIRECTORS
AS OF JANUARY 1, 1993

Office	Name	Title
Office of the Director	Leonard Kirschner, M.D., M.P.H.	Director
	Mabel Chen, M.D.	Deputy Director
Office of Policy and Intergovernmental Relations	Linda Huff Redman	Executive Administrator
Office of the Medical Director	Belton Meyer, M.D.	Medical Director
Office of Grievance and Appeals	Jack Kelley	Chief Hearing Officer
Office of Managed Care	Richard Potter	Assistant Director
Division of Business, Finance, and Research	Roger Austin	Assistant Director
Division of Member Services	Diane Ross	Assistant Director
Information Services Division	Barbera Bridgewater	Assistant Director

There has been only one change in the AHCCCS organization since October 1991, although there have been changes in the individuals holding directorships of the offices and divisions. The Information Resource and Management Division's name was also changed to the Information Services Division. Functions of the offices and divisions are generally unchanged since July 1990.

The Office of the Director has overall responsibility for the direction of the AHCCCS program. This Office also handles public interface, client assistance, waiver negotiation, and policy direction. One change that has occurred is the addition of a General Counsel to the AHCCCS program. The General Counsel is housed in the Office of the AHCCCS Director. The Office of Policy and Intergovernmental Relations serves as the primary liaison with the regional Health Care Financing Administration (HCFA) office and the state legislature. It also coordinates rules and regulations, intragovernmental agreements (IGAs), and agency policy analysis and evaluation.

The Office of the Medical Director is responsible for medical policy development, and utilization and quality assurance activities. It is involved in defining provider qualification requirements, FFS network development, mental health service coverage and monitoring, maternal and child health programming, and catastrophic care management. The Office of Grievance and Appeals is responsible for the investigation and settlement of all member, provider, and contractor grievances and eligibility appeals, and oversees the development and implementation of grievance and appeals procedures by the plans and contractors.

Ensuring plan and contractor program compliance is the responsibility of the Office of Managed Care. The Office monitors reporting, performs audits, and provides eligibility quality control. It is also responsible for detecting fraud and abuse, elderly and physically disabled (EPD) auditing, and provider registration.

The Division of Business, Finance, and Research is the central administrative support unit for AHCCCS. The Division is responsible for

budgeting, accounting, contracting, and research. It also handles human resources, identifying third party liabilities (TPLs), payment methodology development, claims and encounter processing, encounter data validation, purchasing, and provider registration and assistance.

The Division of Member Services (DMS) handles the operational functions of AHCCCS. It has responsibility for financial and medical eligibility determination, inspection of care, oversight of program contractor case management, and FFS ALTCS program management. In addition, the unit has responsibility for enrollment policies, member file integrity, communication and verification of TPL file maintenance, and coordination of enrollment roster data with the plans and contractors.

The operation of the AHCCCS information systems is the responsibility of the Information Services Division. The Division is responsible for information systems development and maintenance, operations and systems analysis, and health plan technical assistance. This includes system testing, local area network management, management of the hardware and software requirements, and system security.

Covered Services

Benefits covered under AHCCCS include almost all traditional Medicaid program services. Benefits covered by AHCCCS acute care plans include outpatient health services, inpatient hospital services, physician services, laboratory, x-ray, medical supplies, home health services in lieu of hospitalization, medical equipment, prosthetic devices, pharmacy, emergency services, emergency dental care, emergency ambulance and medically necessary transportation, medically necessary dentures, podiatry services, family planning services, and early and periodic screening, diagnosis and treatment (EPSDT) services. Kidney, cornea, and bone transplants are covered for all members and heart, liver, and autologous bone marrow transplants for some categories of eligibles. AHCCCS acute care plans also cover skilled nursing

facility (SNF) and intermediate care facility (ICF) services for short-term (less than 90 days) institutional care.

Benefits covered under ALTCS include all of the acute, preventive, and ancillary services noted above, as well as nursing facility, intermediate care facility for the mentally retarded (ICF/MR), and home and community-based services (HCBS) care. HCB services covered by ALTCS include home health care, homemaker services, personal care, adult day health, hospice, respite care, transportation, and home delivered meals. ALTCS also covers habilitation and day-care services for developmentally disabled members. AHCCCS had been pursuing a waiver for attendant care since 1988, which was granted by HCFA in June 1991. The waiver permits family members other than a parent or a spouse to provide attendant care services if they are qualified under the Arizona State Plan.

Although HCB services are covered under the ALTCS program, there is a cap on the amount of HCBS use that will be reimbursed by the federal government for the EPD population. This cap was initially specified as five percent of ALTCS program total expenditures. Because of the difficulty implementing the five percent expenditure ceiling on a prospective basis, AHCCCS imposed a ten percent limit on the percent of a contractor's members that could be in the community receiving HCB services. The percent of ALTCS eligibles allowed to remain in the community receiving HCB services has increased each program year. In fiscal year (FY) 1993 (October 1, 1992 - September 30, 1993), the cap was raised to 30% of the total eligible EPD population.

Since the beginning of the program, AHCCCS has operated under a waiver that limits mental health services provided. Plans for the integration of mental health services into AHCCCS are quite complicated and have experienced numerous revisions in proposed implementation dates over the course of the implementation. This report describes the situation as it was known to us on December 1992. Coverage for mental health services was scheduled to be fully implemented to Medicaid mandatory coverage standards by October 1993. The phase-in began in October 1990 with the initial coverage of EPSDT mental

health services for children under 18 requiring 24-hour supervised care. In April of 1991, coverage was extended to all children under 18. In October 1991, it was extended to eligible individuals 18 through 20 years of age, and in November 1992 it was extended to seriously mentally ill (SMI) adults over 21 years of age in the acute care program. Expansion of services to all beneficiaries was planned for October 1993.

Mental health services being phased in were initially delivered on a FFS basis, but the goal is to have all services capitated by October 1993. All acute care program services were capitated effective November 1992 and ALTCS mental health services are planned to be capitated in 1993. The Arizona Department of Health Services (ADHS) will be capitated for these services for acute care recipients younger than 18 and acute care SMI adult recipients. The acute care plans have an amount added to their capitation payment for non-SMI adults. The LTC program contractors' capitation payment will be adjusted to include these services for all ALTCS eligibles. More specific details on the integration of these services into the AHCCCS program are presented later in the chapter.

Elisibility

By January 1, 1993, a total of 457,100 people were eligible for programs administered by the AHCCCS Administration. This number includes the acute care program, ALTCS, and Native Americans.

Eligibility for the AHCCCS acute care program includes Aid to Families with Dependent Children (AFDC) recipients, Supplemental Security Income (SSI) recipients, the medically indigent (MI) and medically needy (MN), Eligible Low Income Children (ELIC), Eligible Assistance Children (EAC), Children's Medical Program (CMP), and Sixth Omnibus Budget Reconciliation Act (SOBRA) eligibles. Federal eligibility groups are AFDC, SSI, CMP, and SOBRA. State-only eligibility groups are EAC, ELIC, MI, and MN.

Eligibility for ALTCS includes both a financial and functional screen. The standard categorical Medicaid recipients, AFDC and SSI, are automatically financially eligible. In addition, ALTCS extends eligibility to those with gross incomes up to 300% of SSI.

The functional screen certifies the need for LTC services. A preadmission screening (PAS) instrument is used. The PAS is designed to target those beneficiaries who are at immediate risk of institutionalization. The PAS is used to obtain detailed data on patient referral, demographics, functional status, and medical status. It is administered by an AHCCCS nurse or social worker during a face-to-face interview with the ALTCS applicant.

In addition to the ALTCS financial and medical screens, federal legislation requires that all current and future nursing home residents be assessed for mental illness and mental retardation under the Preadmission Screening and Annual Resident Review (PASARR) program. AHCCCS staff apply a PASARR screen at the same time as the PAS. If possible mental illness is indicated, the patient is referred to ADHS for a more thorough evaluation. If possible mental retardation is indicated, the patient is referred to the state Department of Economic Security (DES). Nursing homes must apply the PASARR screen to current residents.

Table 2-2 shows the number of eligibles in the AHCCCS acute care program. AHCCCS eligibles are persons who have met the AHCCCS program eligibility standards and are eligible to receive AHCCCS benefits. Eligibility trends in the AHCCCS program have been largely driven by eligibility changes at the state and federal level and by the status of the state economy. The data presented in this table do not include Native Americans who, as of January 1993, number 45,917.

The number of program eligibles in October of 1983 were 178,000. The number increased to 194,000 by October 1984, but was reduced by 16% during program Year 3 by MI/MN eligibility changes and improvements in the economy. During Year 5, AFDC coverage was extended to all "Ribicoff children" living in households that met AFDC income and resource requirements, but not deprivation

Table 2-2

NUMBER OF AHCCCS ACUTE CARE ELIGIBLES
BY DATE AND CATEGORY OF ELIGIBILITY
(Excluding Native Americans)*

	AFDC**	SSI**	MI / MN	EAC/ELIC	CMP**	SOBRA**	Total
10/1/83	87,644	33,780	57,006	0	0	0	178,430
10/1/84	90,237	36,096	67,332	0	0	0	193,655
10/1/85	84,525	38,016	40,508	0	0	0	163,049
10/1/86	94,271	39,238	42,759	0	0	0	176,286
10/1/87	106,477	40,302	46,335	20,708	0	0	213,822
10/1/88	116,063	40,223	47,818	39,673	0	12,366	256,143
10/1/89	132,827	37,350	38,094	26,121	0	40,511	274,903
10/1/90	154,320	40,098	39,361	25,263	0	62,501	321,543
10/1/91	169,698	37,778	41,911	24,027	0	68,203	341,617
10/1/92	190,330	43,656	46,688	24,035	0	81,796	386,505
1/1/93*	196,180	44,965	46,294	16,545	4,792	85,294	394,070

Source: Monthly AHCCCS Eligibility Reports

* 45,917 Native Americans are also eligible for the AHCCCS program in January 1993: 23,930 AFDC; 7,865 SSI; 1,733 MI/MN; 1,772 EAC/ELIC; 9,976 SOBRA; 641 CMP.

** Eligibility groups receiving federal matching funds.

requirements. As a result, the number of AFDC eligibles increased 13%, from 94,271 in Year 4 to 106,477 in Year 5. In Year 5, the EAC and ELIC children's programs were also added, resulting in an additional 20,708 AHCCCS eligibles. In Year 6, SOBRA women and children (pregnant women and children under age two in households below the federal poverty line) were extended eligibility, adding another 12,366 to the total number of AHCCCS eligibles.

Three changes in eligibility requirements — Qualified Medicare Beneficiary (QMB), SOBRA, and Aid to Families with Dependent Children of Unemployed Parents (AFDCUP) - in recent years have affected the AHCCCS program's number of eligibles. The QMB program became effective July 1989. QMBs meeting the asset and income requirements are entitled to have their Medicare premiums, deductibles, and copayments paid by AHCCCS. SOBRA income levels were raised. In October 1990 the AFDCUP program was implemented. The program provides case assistance to qualifying two-parent families. These changes resulted in a 17% increase in the number of AHCCCS eligibles during Year 8 (from 274,903 to 321,543 eligibles) and a 6% increase during Year 9 (from 321,543 to 341,617).

From October 1991 to January 1993, the number of eligibles continued to increase. The largest increase in eligibility was for SOBRA women and children and SSI beneficiaries (25% and 19% respectively). The MI/MNs increased 10% and AFDC 16%. In October 1992, a new eligibility group, CMP, was added to cover children aged 6-14. This program receives federal financial participation. Since October 1992, there has been a decrease in the EAC category as many of the beneficiaries in the new CMP category were previously eligible for AHCCCS under the EAC program.

Table 2-3 shows the growth in the number of ALTCS eligibles during the first four years of the ALTCS program. ALTCS became operational on December 19, 1988 for the mentally retarded/developmentally disabled (MR/DD) population and on January 1, 1989 for the EPD population. By the end of the first FV of the ALTCS program, the total number of ALTCS eligibles (including both MR/DD and EPD) had reached 10,616. During the second year of the ALTCS program the number of eligibles increased 23%, reaching a total of 13,102 by October 1,

Table 2-3

NUMBER OF ALTCS ELIGIBLES* BY DATE

January 1, 1989	3,103
April 1, 1989	6,893
July 1, 1989	9,308
October 1, 1989	10,616
January 1, 1990	11,415
April 1, 1990	11,658
July 1, 1990	12,380
October 1, 1990	13,102
January 1, 1991	13,482
April 1, 1991	13,671
July 1, 1991	14,019
October 1, 1991	14,501
January 1, 1992	15,087
April 1, 1992	15,446
July 1, 1992	16,070
October 1, 1992	16,688
January 1, 1993	17,113

Source: **AHCCCS,** Management Summary (ALTCS) Report, January 1, 1993.

* **There are no AHCCCS reports available prior to April** 1, 1991 that **provide data on the number of people who were eligible for ALTCS** but were not enrolled with a program contractor or handled by the **AHCCCS program directly in noncontracted counties.**

1990. The growth in the number of eligibles during the third year was half as much as in the second program year, increasing 11% to reach 14,501 eligibles as of October 1, 1991. In the fourth year the program grew to 16,688 beneficiaries, an increase of 15%. By the beginning of 1993, ALTCS had grown to 17,113 beneficiaries.

Health Care Plans and Contractors

AHCCCS contracts with acute care plans and LTC program contractors for covered medical services. The plans and contractors in turn arrange for the provision of these services through arrangements with hospitals, LTC institutions, physicians, laboratories, pharmacies, and medical equipment suppliers. There are 14 AHCCCS acute care plans. Twelve of the 15 Arizona counties are served by at least two plans, while in three counties (Greenlee, La Paz, and Yuma) there is only one plan. Table 2-4 lists the plans and the counties in which they are providing services. Partial county coverage is indicated by a P in parentheses (P) after the county name. Plans are reimbursed a capitation amount that varies by eligibility group, county, and plan.

There are six ALTCS EPD program contractors: Maricopa County Long-Term Care (Maricopa LTC), Pima Health System (PHS), Ventana Health Systems (VHS), Pinal County Long-Term Care (Pinal LTC), Arizona Physicians Independent Physicians' Association Long-Term Care (APIPA LTC), and Comprehensive AHCCCS Plan (CAP). There is one ALTCS MR/DD program contractor, DES. Table 2-5 presents ALTCS EPD program contractors and the counties in which they provide services. Maricopa, Pima, and Pinal counties are the contractors for all EPD clients in their respective counties. CAP provides ALTCS services to EPDs in Coconino County. APIPA LTC provides ALTCS services to EPDs in Yuma County. VHS is the contractor for EPDs in eight small rural counties: Cochise, Gila, Graham, Greenlee, Mohave, Navajo, Yavapai, and La Paz. AHCCCS provides services on a FFS basis to EPDs in the remaining two counties: Apache and Santa Cruz. EPD contractors are paid a capitated amount for their enrollees which ranged from a low of $1,776.80 to VHS in La Paz and Mohave counties to a

Table 2-4

COUNTIES SERVED BY AHCCCS ACUTE CARE PLANS
AS OF OCTOBER 1992

Plan Name	Counties Served
AHCCCS Select	Maricopa (P) Pima Pinal (P)
Arizona Health Concepts	Mohave Yavapai
Arizona Physicians, IPA	Cochise Coconino Gila Graham Greenlee La Paz Maricopa Mohave (P) Navajo Pima Pinal (P) Santa Cruz Yavapai Yuma
Comprehensive AHCCCS	Coconino (P) Yavapai (P)
Doctors Health Plan	Graham
Family Health Plan of Northeastern Arizona	Apache (P) Gila Navajo Pinal (P)
Health Choice Arizona	Maricopa (P) Pima Pinal (P)

Table 2-4 (Concluded)

COUNTIES SERVED BY AHCCCS ACUTE CARE PLANS
AS OF OCTOBER 1992

Plan Name	Counties Served
Maricopa Health Plan	Maricopa
Mercy Care Plan	Cochise Maricopa Pima Pinal Santa Cruz
Phoenix Health Plan	Maricopa (P) Pinal (P)
Pima Health System	Pima
Regional AHCCCS Plan	Maricopa (P) Pinal
SHS Medical Care Systems	Apache
St. Luke's Advantage Health Plan	Maricopa

Source: State of Arizona, AHCCCS Prepaid Health Plan Options, October 1992.

P Indicates partial county coverage.

Table 2-5

COUNTIES SERVED BY ALTCS EPD PROGRAM CONTRACTORS AS OF OCTOBER 1992

Proaram Contractor	Counties Served
Arizona Physicians, IPA	Yuma
Comprehensive AHCCCS	Coconino
Maricopa County Long-Term Care	Maricopa
Pima Health Systems	Pima
Pinal County Long-Term Care	Pinal
Ventana Health Systems	Cochise Gila Graham Greenlee La Paz Mohave Navajo Yavapai

Source: AHCCCS, ALTCS Program Contractors **By County, Year** 11.

high of $2,060.77 per month to PHS in Pima County in FY 93. The rates differ by county, but not by any other beneficiary characteristic. Rates are the same for Medicare beneficiaries and for those without Medicare. They are also the same for those receiving HCBS and those in nursing homes. The rates paid are constructed by assuming a defined mix of nursing home and HCBS users and of Medicare beneficiaries in the county.

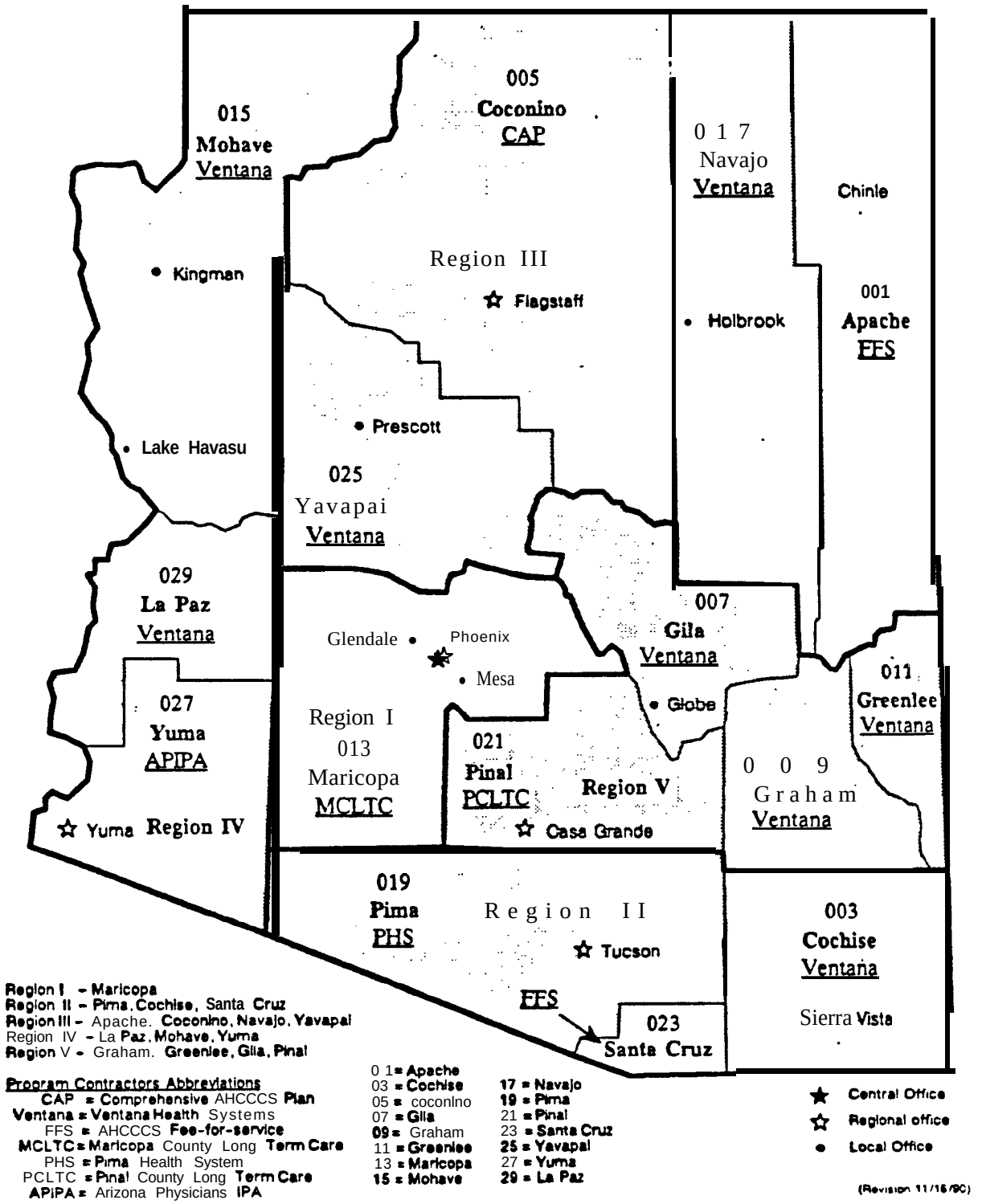
DES is the contractor for all MR/DDs statewide. In the beginning of the program DES was paid a per diem rate by ALTCS that varied by the level of care (SNF, ICF/MR, ICF, and HCBS) and type of enrollee (AFDC, aged, blind, disabled). Because no audit of first year DES rates was made available to the federal government until August 1992, DES was reimbursed at the first year rates through FY 92. A disabled person receiving HCB services for 30 days was capitated at $1,782 per month (30 days at $54.46 per day for HCB services and $148.18 per month for acute care services). Rates were revised beginning FY 93. Beginning October 1992, all MR/DDs are capitated at $2,511.87 per month. No reconciliation of this amount is planned. The rate is made up of $2,246.20 for LTC services (institutional and HCB) and $265.67 for acute care services. A map of Arizona which shows ALTCS program contractors and AHCCCS branch offices by county is presented in Figure 2-2.

Table 2-6 presents AHCCCS acute plan enrollment by plan as of January 1, 1993. The Indian Health Service (IHS) serves 10.5% of the beneficiaries. The four largest non-Indian Health Service plans, APIPA, Mercy Care Plan, Maricopa County Health Plan, and Phoenix Health Plan, serve 64.4% of plan enrollees, while the remaining 25.1% of the beneficiaries are served by the smaller plans.

Table 2-7 presents ALTCS enrollment by program contractor. As of January 1, 1993, there were 17,113 ALTCS enrollees, of which 398 were Native Americans enrolled with tribal providers. Approximately 36% of the ALTCS enrollees were MR/DDs enrolled with DES. 10,221 ALTCS enrollees were enrolled with an EPD program contractor. Maricopa LTC had 35% of total ALTCS enrollees, and Pima LTC had 13%. Nine percent of the ALTCS enrollees were enrolled in VHS, two percent in Pinal LTC, two percent in APIPA LTC, and one

Figure 2-2

ALTCS PROGRAM CONTRACTORS BY COUNTY



Source: AHCCCS, Office of Policy and Intergovernmental Relations

Table 2-6

ACUTE CARE PLAN ABBREVIATION AND NUMBER AND
PERCENT OF ENROLLEES BY PLAN
AS OFJANUARY 1, 1993

	Abbreviation	Number	Percent
AHCCCS Fee-For-Service*	AHCCCS FFS	78	0.0
AHCCCS Select	SELECT	21,187	4.9
Arizona Health Concepts	AHC	14,322	3.3
Arizona Physicians IPA, Inc.	APIPA	128,329	29.5
Comprehensive AHCCCS Plan, Inc.	CAP	5,428	1.3
Department of Economic Security	DES	3,589	0.8
Doctor's Health Plan	DHP	2,592	0.6
Family Health Plan of Northeastern Arizona, Inc.	FHPNA	5,262	1.2
Health Choice Arizona	HCA	16,622	3.8
Indian Health Service	IHS	45,917	10.5
Maricopa County Health Plan*	MCHP	43,918	10.1
Mercy Care Plan	MCP	74,030	17.0
Phoenix Health Plan	PHP	34,065	7.8
Pima Health System*	PHS	14,151	3.3
Regional AHCCCS Health Plan	RAHP	9,116	2.1
Samaritan Health Service	SHS	1,907	0.4
St. Luke's Advantage Health Plan	SLAHP	15,000	3.4
All Plans		435,513	100.0

Source: AHCCCS Acute Enrollment Summary Report, January 1, 1993.

* This includes 108 beneficiaries in Maricopa County Health Plan, 41 beneficiaries in Pima Health System, and 66 beneficiaries in AHCCCS FFS who are eligible for both LTC and acute care services but not eligible for ALTCS.

Table 2-7

LONG-TERM CARE CONTRACTOR ABBREVIATION, AND NUMBER AND PERCENT OF ENROLLEES AS OF JANUARY 1, 1993 BY CONTRACTOR

	Abbreviation	Number	Percent
AHCCCS Fee-For-Service	AHCCCS FFS	286	1.7
Arizona Physicians IPA Long-Term Care	APIPA LTC	300	1.8
Comprehensive AHCCCS Plan	CAP	90	0.5
Department of Economic Security	DES	6,208	36.3
Indian Tribe Providers*	Indian Tribe Providers	398	2.3
Maricopa County Health Plan	MCHP	6,057	35.4
Pima Health System	PHS	1,867	10.9
Pinal County Long-Term Care	Pinal LTC	370	2.2
Ventana Health Systems	VHS	1,537	9.0
All Contractors		17,113	100.0

Source: AHCCCS Enrollment/Eligibility Status Report, January 1, 1993.

* This includes 237 Native American beneficiaries enrolled with Navajo Nation, 53 with White Mountain Apache Tribe, 45 with Gila River Tribe, 41 with San Carlos Apache Tribe, 17 with Pasqua Yaqui Tribe, and 5 with Fort McDowell Indian Community.

percent in CAP. ALTCS recipients who were served by AHCCCSA directly number 286 or two percent of total ALTCS enrollees.

Revenues and Expenditures

AHCCCS is funded by a combination of county, state, and federal funds. Table 2-8 shows AHCCCS revenues and expenditures for state fiscal year (SFY) 88, 89, 90, 91, 92, and 93. SFY 88 was a pre-ALTCS AHCCCS program year. The ALTCS program began in the middle of SFY 89, with full implementation in SFY 90. Actual revenues and expenditures are available for SFY 88 through SFY 91. SFY 92 numbers are year-to-date received or expended numbers. SFY 93 figures are estimates from the AHCCCS budget.

Revenues

AHCCCS revenues have increased dramatically over the past six SFYs, from $387 million in SFY 88 to $1.36 billion estimated for SFY 93. In SFY 90, the year after ALTCS implementation, revenues were $809 million. The current estimate for SFY 93 is 68% higher than SFY 90 revenues.

As can be seen in Table 2-9, the percentage of program revenues from the federal government has increased dramatically from SFY 89. In SFY 89, the federal government contributed 37% of program revenue. In SFY 93, it is estimated to contribute 56%. State and county participation has decreased. State appropriations made up 45% of program revenue in SFY 89. This amount is projected to decrease to 32% in SFY 93. County percentage contributions to the program have also decreased from 15% in SFY 88 to an estimated 12% in SFY 93. Figure 2-3 illustrates the shifting of AHCCCS revenue sources from SFY 88 to SFY 93.

Table 2-8

AHCCCS REVENUES AND EXPENDITURES
FOR SFY 88 THROUGH SFY 93
(Millions of Dollars)

	SFY 88*	SFY 89"	SFY 90t	SFY 91*	SFY 92t	SFY 93**
Revenues	387.04	535.01	808.97	957.53	1,175.05	1,360.06
Federal	139.51	196.49	407.63	472.40	598.62	764.57
County	57.47	93.06	120.77	146.95	153.04	157.37
State	187.19	242.45	273.82	333.19	420.69	431.51
Miscellaneous+t	2.87	3.01	6.75	4.99	2.70	6.61
Expenditures	371.61	554.52	745.66	949.43	1,150.30	1,370.82
Capitation	243.30	295.92	373.71	487.63	629.43	763.73
ALTCS Medical Services	0.00	68.44	183.86	250.61	239.76	264.24
Fee-for-Service	72.62	98.53	82.01	66.22	123.56	121.22
Children's Rehabilitation	4.94	7.04	8.12	14.00	8.71	10.74
Reinsurance	15.41	22.23	25.51	31.85	20.45	35.97
Deferred Liability	0.00	0.00	0.00	23.30	22.70	32.01
Medicare Premiums***	4.98	6.71	7.28	6.92	8.57	6.43
Qualified Medicare Beneficiaries	0.00	0.00	0.00	0.00	0.95	0.94
Mental Health	0.00	0.00	0.00	0.00	28.25	41.77
AHCCCS Administration+++	30.36	55.65	65.17	68.90	67.92	93.77

Source: AHCCCS, Division of Business, Finance, and Research, July 1992 (for SFY 88-91, and SFY 93) and December 1992 (for SFY 92).

* Actual
t Year-to-date received or expended
** Estimated
tt Includes interest income, third party collections, and fiscal sanctions.
*** Also includes charges related to Medicare Catastrophic of 0.06 million in SFY 90.
ttt AHCCCS Administration expenditures reported separately for AHCCCS and ALTCS Administration were not available from AHCCCS.

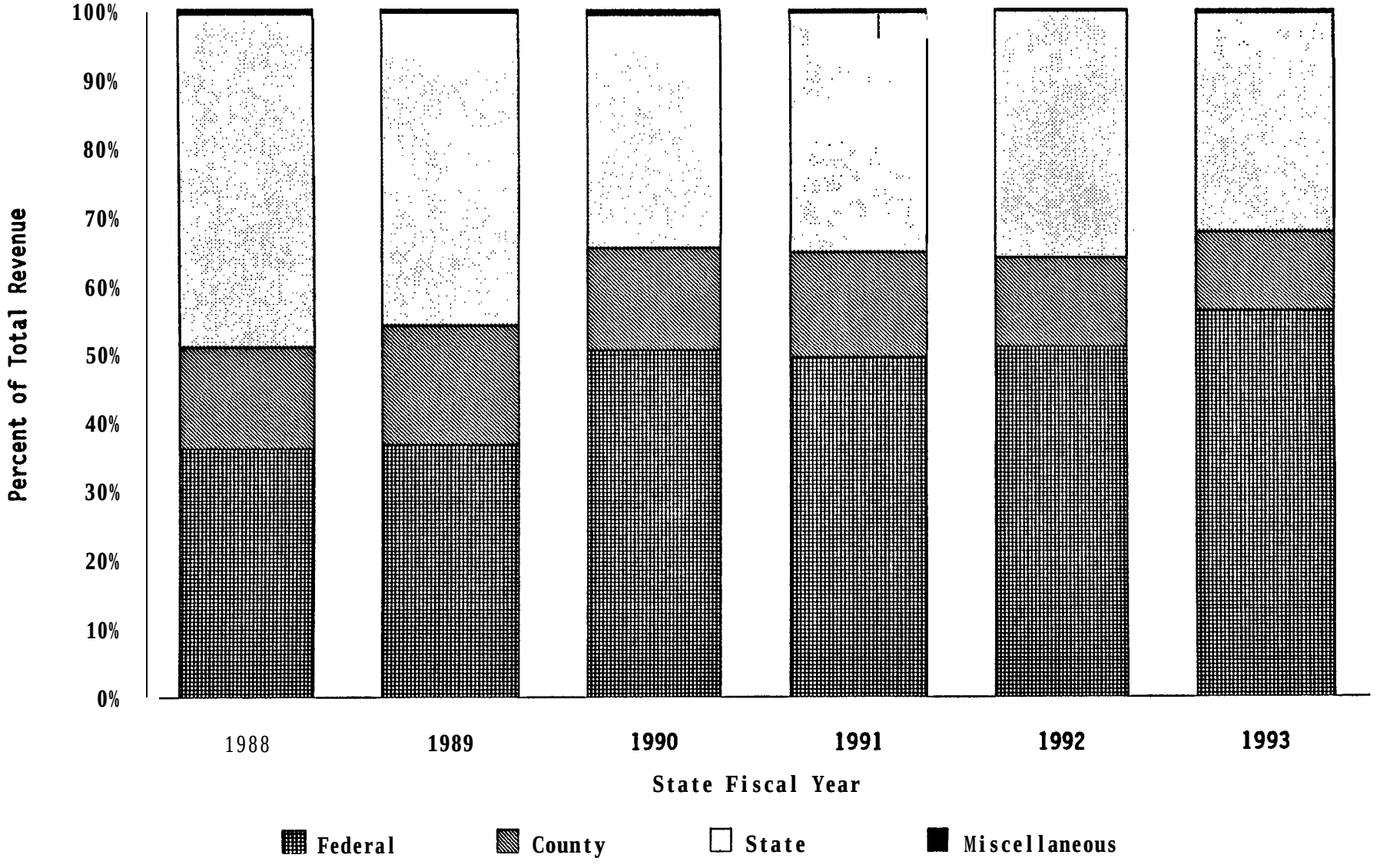
Table 2-9

DISTRIBUTION OF AHCCCS REVENUES AND EXPENDITURES FOR SFY 88 THROUGH SFY 93

	SFY 88	SFY 89	SFY 90	SFY 91	SFY 92	SFY 93
Revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Federal	36.05	36.73	50.39	49.33	50.95	56.21
County	14.85	17.39	14.93	15.35	13.02	11.57
State	48.36	45.32	33.85	34.80	35.80	31.73
Miscellaneous	0.74	0.56	0.83	0.52	0.23	0.49
Expenditures	100.00	100.00	100.00	100.00	100.00	100.00
Capitation	65.47	53.37	50.12	51.36	54.72	55.71
ALTCS Medical Services	0.00	12.34	24.66	26.40	20.84	19.28
Fee-for-Service	19.54	17.77	11.00	6.97	10.74	8.84
Children's Rehabilitation	1.33	1.27	1.09	1.48	0.76	0.78
Reinsurance	4.15	4.01	3.42	3.35	1.78	2.62
Deferred Liability	0.00	0.00	0.00	2.45	1.97	2.34
Medicare Premiums	1.34	1.21	0.97	0.73	0.75	0.47
Qualified Medicare Beneficiaries	0.00	0.00	0.00	0.00	0.08	0.07
Mental Health	0.00	0.00	0.00	0.00	2.46	3.05
AHCCCS Administration	8.17	10.03	8.74	7.26	5.90	6.84

Figure 2-3

PERCENTAGE OF TOTAL REVENUES BY SOURCE
SFY 88 - SFY 93



Expenditures

Data on AHCCCS expenditures are available from the AHCCCS Administration in the following categories:

- Capitation payments to acute care plans.
- ALTCS medical service payments to LTC contractors for capitation, or reinsurance for FFS providers.
- FFS payments for acute care eligibles including payments for deferred liability where an acute care provider is eligible to receive payments from AHCCCS for a beneficiary hospitalized at enrollment.
- Reinsurance payments to acute care plans for beneficiaries' services over their reinsurance amounts.
- Children rehabilitation payments to FFS providers for crippled children.
- Medicare premiums for acute care and long-term care AHCCCS Medicare beneficiaries.
- QMB program — Medicare premiums, copayments, and deductibles for qualifying Medicare beneficiaries.
- Mental health services being phased into the program.
- AHCCCS administration for both the acute care and LTC program.

Overall, AHCCCS expenditures have increased from $372 million in SFY 88 to an estimated $1.36 billion in SFY 93, an increase of 251%. Some of this is due to the initiation of new programs: ALTCS ($264 million), Mental Health ($42 million), Medicare QMB payments ($1 million), but much is due to increases in numbers eligible for existing programs.

Capitation to acute care plans has increased 214%, from $243 million in SFY 88 to an estimated $764 million in SFY 93. Fee-for-service payments for acute beneficiaries have increased 67%, from $73 million to $121 million. Reinsurance payments have increased by 133%, from $15 million to an estimated $36 million.

New programs since SFY 88 — ALTCS, Mental Health, and QMB — make up 22% of SFY 93 estimated expenditures. Fee-for-service payments as a percentage of FFS and capitation payments for acute beneficiaries have decreased over the six-year period from 23% in SFY 88 to 14% projected for SFY 93.

Reinsurance expenditures as a percentage of total program costs have decreased from four percent to over two and a half percent. Expenditures for the Children's Rehabilitation program are estimated to be $10.74 million in SFY 93, about one percent of total projected expenditures. This program also accounted for about one percent of expenditures in SFY 88. Medicare premiums have decreased as a percentage of total expenditures from more than one percent to less than a half percent.

Quality Assurance

The AHCCCS program has a number of quality assurance activities in place to monitor quality assurance in the program in general and among acute care plans and LTC contractors. The AHCCCS Office, of the Medical Director is the central administrative arm which monitors these activities, although the Division of Medical Services also has important responsibilities in this area, especially for LTC services.

Quality assurance activities focus both on structure and process issues and on outcome issues. Quarterly quality assurance reports are required from the plans and contractors and the program conducts medical audits. The most recent medical audit that we were able to receive a copy of was the Year 8 prenatal care audit. More recent medical audits were not available. The prenatal care audit collected information from the medical records of 4,600 newborns, randomly selected from all newborns between October 1, 1989 and March 31, 1991, whose mothers were enrolled in AHCCCS for at least 30 days before delivery. Information collected included length of stay, type of delivery, birth weight, Arizona Standardized Case Management Assessment Review (ASCAR) scores, and other factors affecting outcome. AHCCCS found a mean

length of stay of 1.7 days with 55% having one-day stays. Caesarian sections accounted for 17% of the deliveries. The report did not put forward any conclusions concerning overall quality of care or quality of care between plans.

The ALTCS program has a quality assurance program in place similar in concept to the acute care program. A complete description of the ALTCS quality assurance program was given in our First Implementation and Operation Report. The Request For Proposal (RFP) (for private contractors) or Comprehensive Service Delivery Plan (CSDP) (for counties) specifies that it is the responsibility of the contractors to design, implement, and maintain an effective quality assurance and utilization review program.

The program contractor is responsible for the quality of care its providers deliver to ALTCS patients and must ensure that its providers cooperate with all quality assurance and utilization review activities. The program contractors must comply with ALTCS, state, and federal regulations; monitor providers' compliance with regulations; develop internal quality assurance standards; and provide technical assistance to providers. The ALTCS program contractors use site visits, medical care evaluation (MCE) studies, complaint investigations, patient surveys, mortality reviews, and incidence reports to monitor provider quality. The program contractors are required to submit to AHCCCS written, comprehensive quality assurance and utilization review plans. The plans must be reviewed and updated annually. The plan must address quality assurance committees, MCE studies, and quality assurance quarterly reports.

The AHCCCS program provides technical assistance and requires quality assurance plans and quarterly quality assurance reports from each contractor. The first ALTCS LTC care audit, "Falls Sustained by Residents Residing in Nursing Homes," was finalized in the summer of 1992. Although no date appears on the document, we received it in December 1992. It reviewed the cases of 104 fractures that were identified through the claims and encounter data files that had a diagnosis of hip, femur, or pelvic fracture. As with the acute care audit for Year 8 reported earlier, it provided descriptive information on

the cases: day of week of fracture, type of fracture, location at time of fracture, month and year of fracture, and associated activity. However, it made no conclusions concerning quality of care.

The latest AHCCCS audits available to the evaluator were described above. The Year 9 and later medical audits and any other LTC audits have not yet been released. As of February 1993, the evaluator was not able to acquire any information relating to audits planned or in process.

Changes in Payment Methodology for Fee-For-Service Providers

Although most services are provided by the health plans and contractors under capitated arrangements with AHCCCS, some services are provided on a capped FFS basis. These payments are generally for the services of eligibles in areas without a plan or provider or for eligibles before they are enrolled with a plan or contractor. FFS payments by AHCCCS were 11% of program expenditures in SFY 92 and are projected to be nine percent of program expenditures in SFY 93.

This section documents two changes that occurred or will occur in the methods AHCCCS uses to pay FFS providers. One change relates to the methodology for paying physicians. The second change relates to the methodology for reimbursing inpatient hospital admissions.

Physician Fee Schedule Uodate

AHCCCS initiated work in 1991 to address issues of inequities in its payment schedules for physician services provided to FFS and unenrolled members. AHCCCS decided to change from a fee schedule based on the 1974 California relative value scale to the new HCFA reimbursement methodology for Medicare, the resource based relative value scale (RBRVS). HCFA is using the RBRVS to replace the usual, customary and reasonable charge payment

methodology it used for the Medicare program prior to 1992. This change took effect in the spring of 1992.

The RBRVS is composed of thousands of service definitions each connected to a relative value unit (RVU). To calculate the dollar amount to be allowed for that service, the RVU is multiplied by a dollar conversion factor. The AHCCCS' conversion factors are similar but not identical to Medicare's and the exact methodology differs somewhat. As an example of one difference, geographic adjustment factors are not included in AHCCCS' calculations of allowed charges but they are an important component of the Medicare RBRVS reimbursement.

Change in Inpatient Hospital Reimbursement

After several years of study and planning, the AHCCCS hospital reimbursement methodology for inpatient admissions will be changed in March 1993 from one based on adjusted billed charges (ABC) to a prospective methodology. Under the new methodology, AHCCCS will set per diem prospective rates. These rates will include both reimbursement for room and board and ancillary service expenses.

The system will set payments for seven levels of care based on peer-grouped hospital costs. Costs associated with capital and direct medical education will be added on. Rates will be annually adjusted for inflation and for changes in length of stay.

Because of data quality problems found in the outpatient hospital data set, a new outpatient hospital services methodology was not able to be developed. Beginning in March 1993 and continuing until a new prospective system is designed, outpatient hospital services will be reimbursed by multiplying charges by hospital-specific cost-to-charge ratios.

Health plans will be allowed to use alternate reimbursement methodologies but will not be reimbursed more as part of the capitation rate than would be paid out in aggregate using the new tiered per diem methodology.

Inteoration of Mental Health Services

Plans for the integration of mental health services into the AHCCCS program are quite complicated and have experienced numerous revisions in implementation dates over the course of the implementation. This section describes the implementation plans known to us as of December 1992.

AHCCCS initially received a waiver that permitted it to limit mental health and substance abuse services provided to AHCCCS eligibles until October 1, 1993. However, section 6403 of the Omnibus Budget Reconciliation Act of 1989 (OBRA 89) required states to provide all EPSDT services, including mental health and substance abuse services, to eligible children. AHCCCS applied for an additional waiver to delay implementation of the OBRA 89 requirements, and was granted an extension until October 1, 1990 for EPSDT children with emotional disturbances and until April 1, 1991 for the remaining EPSDT children. Thus, October 1, 1990 marked the beginning of a three-year process to implement a mental health program for all AHCCCS eligibles. At the end of the three years, all AHCCCS eligibles should be covered for all Medicaid mental health and substance abuse services through the AHCCCS program.

Covered Groups

At the mental health program's inception on October 1, 1990, coverage for mental health and substance abuse services was initially extended to children under 18 who required 24-hour supervised care. On April 1, 1991, coverage was broadened to include all AHCCCS-eligible children under the age of 18. AHCCCS eligibles aged 18 to 20 were added to the program on October 1, 1991. On November 1, 1992, eligible adults (over 20 years of age) diagnosed as SMI were brought into the program. The next group expected to receive

coverage is ALTCS eligibles aged 65 years and older. Coverage is planned for all non-SMI adults on October 1, 1993.

Delivery of Services

The delivery of mental health and substance abuse services involves the participation of a number of entities. Similar to the acute care and long-term care programs, AHCCCSA is responsible for overall administration and oversight, policy development, fiscal management, and program monitoring for the mental health program. For a given client, the entity with primary responsibility for the provision of mental health and substance abuse services is determined by which program the individual is enrolled in (the acute care program or ALTCS) and by the individual's characteristics (i.e., age and diagnosis).

ADHS is responsible for delivering mental health and substance abuse services to AHCCCS eligibles enrolled in the acute care program who are either: 1) under 18 years of age or 2) 18 years or older and diagnosed as SMI. ADHS must ensure that it has a mental health provider network that is sufficient to meet the needs of its AHCCCS clients. This is accomplished largely through the statewide mental health service delivery system that ADHS had developed prior to implementation of AHCCCS' mental health program. To provide mental health and substance abuse services, ADHS contracts with a network of Regional Behavioral Health Associations (RBHAs). Each RBHA has a contractual arrangement with ADHS to provide, or subcontract for the provision of, mental health and substance abuse services for a given geographic region of the state. These organizations are responsible for selecting, recruiting, credentialling, implementing, and managing their provider networks.

ADHS is also responsible for implementing IGAs with Native American tribes for the provision of services by on-reservation service agencies or practitioners to eligible Native American children under 18 years of age who live on Arizona reservations. Several Tribal Governments plan to assume

responsibility for provision of mental health services to members of their tribe.

AHCCCS eligibles who do not fall under the domain of ADHS receive mental health and substance abuse services through their health plan or program contractor. Health plans and program contractors are responsible for developing a mental health provider network. In doing so, they can build on the ADHS network and supplement it with alternative providers where gaps exist or if specific expertise is needed.

Below we describe how mental health and substance abuse services are being integrated into the acute care program. This is followed by a description of the integration of the mental health program into ALTCS.

Acute Care Program

In providing services to adult eligibles who are enrolled in the acute care program, a distinction is made between individuals diagnosed as SMI and those with non-SMI diagnoses. Since October 1991, the acute care health plans have been responsible for non-SMI adult eligibles aged 18 to 20. Effective October 1, 1993, the health plans are also scheduled to cover non-SMI adults aged 21 and older. For these groups of eligibles, mental health and substance abuse services may be bundled in the capitation payment with the other AHCCCS-covered services. (This decision is up to the Arizona legislature and has not yet been made.) A client's primary care physician, in consultation with qualified mental health professionals as necessary, is responsible for determining the client's need for mental health and substance abuse services.

ADHS delivers mental health and substance abuse services to children and adult SMI eligibles enrolled in the acute care program. When the mental health program was first implemented in October of 1990, ADHS was paid on a FFS basis for the provision of services to eligible children. One year later, capitation for adult clients was introduced, concurrent with the expansion of coverage for 18 to 20 year olds. The move toward full capitation of ADHS was

completed November 1, 1992, at which time payment for the provision of services to children under 18 years of age converted from FFS to capitation and SMI adults aged 21 and older were folded into the program. The RBHAs are, in turn, placed at risk through subcapitation by ADHS. ADHS also receives capitation payments for implementing IGAs with Native American tribes.

Screening and evaluation for ADHS eligibility is done by the RBHAs. The RBHAs receive referrals for mental health and substance abuse services from health care providers, AHCCCS health plans, schools, courts, juvenile and adult corrections, and self-referral by clients or their parents or guardians. In such cases, the RBHA determines whether the individual is a child in need of mental health or substance abuse services or is an SMI adult in need of such services. Eligibility for adult clients is'determined by an SMI checklist (similar to the PAS instrument used in the ALTCS program).

A treatment plan for eligible individuals is developed by a case manager or a multidisciplinary clinical team composed of a physician, nurse, social worker, case manager, and other clinicians as necessary. The RBHA has authority to approve the treatment plan. A case manager is assigned responsibility for developing an individual service plan (ISP) based on the treatment plan goals and objectives. The ISP identifies specific service providers, service locations, periods of service, and the number of units of service (by type of service) for all services.

ALTCS Program

Upon full implementation of the mental health program, the program contractors will be responsible for providing mental health and substance abuse services to ALTCS eligibles who require such services. Initially, ADHS provided these services to ALTCS eligibles — to children under age 18 effective October 1, 1990 and to SMI adults aged 18 to 20 effective October 1, 1991. The program contractors began providing mental health and substance abuse services to ALTCS eligibles on October 1, 1991. The first covered group was non-SMI eligibles 18 to 20 years old. On October 1, 1992 responsibility

for children under 18 and SMI adults aged 18 to 20 switched from ADHS to the program contractors. A planned expansion to include eligible individuals aged 65 years and older is scheduled for May 1, 1993.

As of October 1992, program contractors were paid on a FFS basis for the mental health program. It was proposed that program contractors for the EPD population be switched over to a capitation basis for mental health services on February 1, 1993.

EPD eligibles believed to be in need of mental health and substance abuse services are referred by their case manager to a mental health professional for screening and evaluation. If desired, the case manager may refer the eligible individual to a RBHA for screening and evaluation. The case manager also consults with the primary care physician. For eligibles deemed in need of mental health and substance abuse services, the case manager develops an ISP and determines continued need for services.

MR/DD eligibles who are felt to require mental health and substance abuse services are referred by their case manager to a RBHA for screening and evaluation. If the need for such services is established, the case manager will work with the RBHA to develop an ISP for that individual.

Oversight Activities

Primary responsibility for the federal oversight of the AHCCCS program lies with HCFA. Both the HCFA Region IX Office in San Francisco and the central office in Baltimore have responsibilities concerning oversight of the AHCCCS program. The central office's responsibilities have been concerned with ensuring compliance with the Social Security Act 1115 waivers that allow AHCCCS to receive federal Medicaid appropriations as a demonstration project. The San Francisco Regional Office monitors the ongoing operation of the program including having responsibilities for reviewing the federal reimbursements to AHCCCS and monitoring ongoing program implementation. Below, we discuss the HCFA Central Office activities with respect to the 1115

waiver, and the specific operational reviews which have been or are in the process of being conducted by the Regional Office.

Central Office Activities

This section describes the Year 11 waivers and special terms and conditions to the demonstration award, the AHCCCS Disproportionate Share Hospitals Program participation, and continuation activities.

Waivers and Special Terms

The eleventh year of operation of the AHCCCS program was approved by HCFA in October 1992. The total budget was $1.38 billion dollars ($1,383,698,210) with the federal government contributing approximately $927 million. The approval letter listed 11 waivers of the Social Security Act which were to be permitted and 21 special terms and conditions.

Under the authority of section 1115 of the Social Security Act, seven waivers of section 1902 were granted for the following:

(1) To limit the scope of inpatient and outpatient mental health services to acute conditions.

(2) To extend HCB eligibility up to 300% of SSI.

(3) To impose cost sharing on mandatory services and to individuals enrolled in a health maintenance organization.

(4) To restrict freedom of choice of provider.

(5) To obtain maximum flexibility in reimbursement arrangements.

(6) To exclude hospitalized individuals and others not needing LTC from optional institutionalized eligibility category.

(7) To provide attendant care services on a nonstatewide basis for the developmentally disabled population.

Under the authority of section 1115 of the Social Security Act, four waivers were also approved. These four waivers permitted the following expenditures by the state to be regarded as expenditures under the state's Medicaid program:

(1) Expenditures to provide Medicaid to individuals who would be otherwise excluded by virtue of section 1903(b)(i), section 1903(i)(3), or section 1903(m).

(2) Expenditures associated with the provision of HCB services to eligible individuals for program services within the limit placed on the program.

(3) Expenditures to provide Medicaid to individuals during a guaranteed six-month eligibility period even though they ceased to be eligible during this six-month period.

(4) To enable the state to restrict beneficiaries to AHCCCS contract providers.

The special terms and conditions for the year beginning October 1992:

(1) Provide access to ALTCS services to American Indians on reservations.

(2) Conduct a medical audit of all plans for the period October 3, 1992 to September 30, 1993 to be submitted to HCFA by December 31, 1993.

(3) Limit HCB services provided to EPD population to approximately 30% of total EPD population.

(4) Prepare monthly encounter data collection process reports.

(5) Submit quarterly progress reports.

(6) Enforce financial penalties on individual health plans and LTC program contractors not complying with data collection requirements.

(7) Submit a draft and final annual report.

(8) Submit copies of financial audits and quality assessment reviews of health plans.

(9) Take action to correct deficiencies in the collection of encounter data within 90 days of notification by HCFA. If these actions are

ineffective or if the data validation reports are not completed on schedule, HCFA may immediately invoke withholding of payments.

(10) Prepare a cumulative cost expenditure report covering the period through September 30, 1993 by November 30, 1993.

(11) Before signing contracts with any provider of services, obtain full disclosures of ownership and control and related party transactions.

(12) Provide the HCFA Office of Research and Demonstration (ORD) evaluator information necessary to carry out the evaluation within the timeframe requested and without charging any fee.

(13) Acknowledges the rate methodology to be used for reimbursing AHCCCS for acute and LTC services.

(14) Conduct financial audits of plans and contractors.

(15) Acknowledges ORD can renegotiate rate setting methodologies used during award if the assumptions are not in reasonable alignment with national projections.

(16) Inform the HCFA project officer prior to presentations, reports, etc. The final report cannot be released without permission from HCFA during four months after its submission.

(17) At HCFA discretion, provide documented files to HCFA.

(18) At HCFA discretion, deliver materials, systems, or other items developed refined or enhanced in the course of or under the award.

(19) Enforce allowable error rate for encounter data for all AHCCCS contractors of five percent. Intergroup, the new acute care provider, will be exempt for the first year of its contract. (This provision was also extended to Arizona Health Concepts, another new plan, in February 1993.) Sanction DES for its Year 8 encounter data submission.

(20) Prepare a phase-out plan by November 30, 1993. This requirement was deleted by HCFA in February 1993.

(21) Submit eight specified HCFA reports quarterly.

Disorooortionate Share Hosoital Payment

In December 1991, the Arizona legislature approved an AHCCCS Disproportionate Share Program totalling $133.8 million, of which the state

would contribute $50 million and the federal government was requested to provide $83.8 million. To attempt to get HCFA approval for the program, AHCCCS submitted a Medicaid state plan amendment (SPA). In May of 1992, HCFA disapproved the SPA saying that Arizona was exempted from disproportionate share hospital (DSH) requirements because they are a section 1115 demonstration project but agreed to give the state $45.5 million, six percent of FY 92 estimated Medicaid expenditures, for DSH for FY 92 under authority of section 1115 of the Social Security Act.

AHCCCS proposed for FY 93 that the DSH allotments in Arizona be raised to 12% of total Medicaid expenditures. On January 6, 1993, HCFA granted AHCCCS $60,033,304 for DSH for FY 93, six percent of their projected FY 93 total state and federal medical assistance payments.

Continuation Activities

AHCCCS had hoped that they would move out of demonstration status as of October 1993. For the last several years AHCCCS has been actively pursuing a strategy of reducing the number of waivers requested and pursuing legislation to modify the Medicaid statutes. Federal legislation could enable AHCCCS to become a permanent Medicaid program. Such legislation was proposed during 1992, but did not pass. On November 4, 1992, the Director of AHCCCS wrote a letter to the Director of HCFA's ORD asking for a five-year extension of AHCCCS' 1115 waiver. In January 1993, HCFA agreed to extend the AHCCCS program for an additional year through September 30, 1994 so that "AHCCCS may pursue other more permanent means for continuing the program. This extension will provide AHCCCS sufficient time to pursue legislative relief."

Resional Office Activities

During the course of this Implementation and Operation Report (October 1991 - December 1992), the Regional Office has been involved in several specific review activities. These included: preparing final reports of

reviews for EPSDT, AIDS, and preparing a report on Arizona's nurse training and competency evaluation program. They have also been involved in a review of AHCCCS eligibility for pregnant women and children which was conducted during June 1992. Besides the official reviews conducted, the Regional Office is also involved in clarifying HCFA positions. Two issues that were addressed related to the state's responsibility to pay Medicare cost sharing for recipients enrolled in a Medicare HMO and defining an IHS facility that would allow 100% federal medical assistance percentage.

3. EFFECTIVENESS OF PROGRAM CONTRACTORS

Introduction

The Arizona Long-Term Care System (ALTCS) was designed to promote the delivery of quality acute and long-term care services in an environment that encourages cost and utilization control, while improving access to care. At the center of the ALTCS program are the program contractors that receive prepaid capitation payments in return for assuming responsibility for the provision of acute and long-term care services to program beneficiaries. Theoretically, the program contractor model creates incentives for efficiency that are not present in the fee-for-service delivery model. For ALTCS to be successful, program contractors need to develop effective subcontracting processes that enable them to identify efficient methods of delivering care, negotiate advantageous contract rates with providers, and maintain strong quality assurance and utilization review.

In this chapter we discuss three issues that are important to an evaluation of the overall effectiveness of the program contractor model. We conclude this chapter with a discussion of the policy implications of our findings.

Major Evaluation Issues

The first major evaluation issue is contractor selection. In this section, we document the contractor selection process used by the Arizona Health Care Cost Containment System Administration (AHCCCSA) and characteristics of the program contractors that were selected. Next, we assess the contractors' performance in managing and implementing their ALTCS responsibilities. This section documents how the program contractors

subcontract with qualified providers, as well as their grievance and appeals procedures and internal information systems. Finally, we examine the relationship between the contractors and AHCCCSA. These evaluation issues are reviewed first for the program contractors for the elderly and physically disabled (EPD) population. We then turn to the experiences of the Arizona Department of Economic Security (DES), the program contractor for mentally retarded and developmentally disabled (MR/DD) beneficiaries.

To perform this analysis, we reviewed a variety of ALTCS program documents and conducted in-person and telephone conversations with AHCCCSA and program contractor personnel. We examined the Year 9 (ALTCS Year 3) Comprehensive Service Delivery Plan (CSDP) and Request for Proposal (RFP) offered to public and private contractors, respectively, and the subsequent contract renewal documents for Years 10 and 11 (ALTCS Years 4 and 5). We also reviewed the CSDPs and proposals submitted by the bidding contractors.

EPD Contractors

The ALTCS program involves the participation of a number of distinct entities. Official roles and responsibilities of the various participants are outlined in the RFPs and CSDPs issued by AHCCCSA to prospective county and private contractors. AHCCCSA is the state agency with administrative responsibility for the ALTCS program. The Year 9 RFP and CSDP defined eight oversight responsibility areas of AHCCCSA: 1) eligibility determination; 2) preadmission screening; 3) determination of patient class; 4) policy definition; 5) capitation payments; 6) utilization review and quality assurance oversight; 7) centralized data collection; and 8) approval, selection, and regulation of program contractors. AHCCCSA is also required to act as a program contractor in counties for which it is unable to find a qualified program contractor at an acceptable capitation rate.

The program contractor's primary role is to arrange for the provision of ALTCS-covered services to ALTCS eligibles. In fulfilling this role, EPD contractors are responsible for the development of a delivery system that is

capable of delivering all covered long-term care (LTC) and acute care services to their enrolled EPD beneficiaries. The Year 9 RFP and CSDP identified seven major program contractor responsibilities: 1) case management and placement of members, 2) development of a provider network, 3) subcontracts with qualified providers, 4) utilization control and quality assurance, 5) program and financial reporting to AHCCCSA, 6) selection of qualified individual providers, and 7) encounter data submission.

We next turn to the three major evaluation issues: contractor selection, contractor performance, and the relationship between the program contractors and AHCCCSA.

Contractor Selection

In this section we describe the selection process used by AHCCCSA to secure program contractors for EPD beneficiaries and characteristics of participating program contractors.

The initial ALTCS RFP and CSDP solicited program contractors for fiscal year (FY) 89 (Year 7). In Year 8, AHCCCSA renewed the contracts of all participating program contractors. AHCCCSA repeated the contractor selection process for Year 9. The Year 9 contracts that were signed by the program contractors contained renewal options for Years 10 and 11. These processes are described in detail in the First and Second Implementation and Operation Reports of this evaluation.'

In Years 10 and 11, all of the participating program contractors received contract renewal documents from AHCCCSA. For renewal purposes, Year 10 contracts were divided into four groups: private contractors, existing counties, new counties (those joining after the first year of the ALTCS program), and DES. A separate renewal document was tailored for each group. For Year 11, all of the EPD contractors received the same renewal document from AHCCCSA. The contract renewal document presents new ALTCS requirements to the program contractors. Unless altered in the renewal document, all

requirements stated in previous CSDPs and RFPs, contracts, or amendments to these documents remain in force. Required renewal forms relate mostly to financial and organizational issues (e.g., they are required to submit a financial questionnaire, disclosure statement, controlling interest, organizational chart, etc.). Capitation rates are negotiated at each renewal. Responses to the Year 10 contract renewal documents, which were issued on June 14, 1991, were due August 2, 1991. Submission of Year 11 renewal responses were due by August 17, 1992.

All of the participating contractors responded to the contract renewal documents for Years 10 and 11 and all of their contracts were renewed. Informal discussions were held with participating contractors in both years about assuming responsibility for the two fee-for-service counties, Apache and Santa Cruz. EPD contractors and the county or counties that they serve as of January 1993 are presented in Table 3-1. According to the current program rules, there can only be one program contractor per county. As required by law, Maricopa and Pima counties are the program contractors in their respective counties. Rural counties are given the right of first refusal to become program contractors. If a county chooses not to become a program contractor, then AHCCCSA solicits competitive bids from private contractors to serve the EPD population in that county. Through Year 11, Pinal is the only rural county that has exercised its option to become an EPD contractor. Pinal County first became a contractor in Year 9 (ALTCS Year 3). The remaining counties (except Apache and Santa Cruz) are served by private contractors. AHCCCSA contracts with Ventana Health Systems (VHS) to provide ALTCS services in Mohave, La Paz, Yavapai, Navajo, Graham, Greenlee, Gila, and Cochise counties. Comprehensive AHCCCS Plan (CAP) is the ALTCS contractor in Coconino County. Arizona Physicians' Independent Physicians Association Long-Term Care (APIPA LTC) serves the EPD clients in Yuma County.,

AHCCCSA itself is the program contractor in Apache and Santa Cruz counties because it has not found a qualified provider at an acceptable capitation rate. In April 1992, AHCCCSA and APIPA LTC opened a dialogue

Table 3-1

PROGRAM CONTRACTORS, COUNTIES SERVED, AND NUMBER OF ALTCS BENEFICIARIES* AS OF JANUARY 1, 1993

	County	Number of Beneficiaries
All Contractors		16,429
EPD		10,221
County		8,294
Maricopa LTC	Maricopa	6,057
PHS	Pima	1,867
Pinal LTC	Pinal	370
Private		1,927
APIPA LTC	Yuma	300
CAP	Coconino	90
VHS		1,537
	Cochise	315
	Gila	210
	Graham	93
	Greenlee	16
	La Paz	34
	Mohave	291
	Navajo	111
	Yavapai	467
MR/DD		6,208
DES	Statewide	6,208

Source: ALTCS Enrollment/Eligibility Status Report, January 1, 1993.

* This does not include 237 Native American beneficiaries enrolled with Navajo Nation, 53 with White Mountain Apache Tribe, 45 with Gila River Tribe, 41 with San Carlos Apache Tribe, 17 with Pasqua Yaqui Tribe, and 5 with Fort McDowell Indian Community.

regarding the possibility of APIPA LTC expanding its role as an ALTCS contractor into Santa Cruz County. Negotiations continued through November 1992 at which time they were terminated by APIPA LTC.

Because Year 12 will be a bid year, it is more likely that contractor changes will occur at that time. A number of rural counties have expressed interest in exercising their option to become program contractors. One motivation seems to be the desire for more county control of the ALTCS program. One rural contractor commented that it expects to face significant competition for Year 12 ALTCS contracts. The contractor also indicated that it is planning to compete for Year 12 contracts in counties that have previously been served by another private contractor.

Some private contractors continue to express interest in competing in urban areas. This is currently precluded under the current program laws; however, these laws could be changed by the state legislature.

Also shown in Table 3-1 is the number of ALTCS beneficiaries served in each county. The majority of EPD beneficiaries are served by the two urban contractors, Maricopa LTC and Pima Health System (PHS). As of January 1, 1993, these contractors had 6,057 and 1,867 enrollees, respectively, representing 78% of the EPD population. Of the private contractors, VHS had the greatest number of enrollees, 1,537, representing 15% of the EPD population.

Program contractors were required to report on two organizational characteristics, referred to by AHCCCSA as type of offeror and type of entity, in their Year 9 CSDPs and bids.* With respect to type of offerer, all of the private contractors classified themselves as independent practice associations (IPAs), as shown in Table 3-2. The county contractors classified themselves under a variety of organizational models — staff (Maricopa LTC), network (PHS), and group (Pinal LTC). With respect to type of entity, APIPA LTC and CAP are both not-for-profit organizations. VHS is the only for-profit corporation participating in the program.

Table 3-2

ORGANIZATIONAL CHARACTERISTICS OF PROGRAM CONTRACTORS

	Type of Offeror	Type of Entity
EPD		
County		
Maricopa LTC	Staff	Governmental
PHS	Network	Governmental
Pinal LTC	Group	Governmental
Private		
APIPA LTC	IPA	Not-For-Profit Corporation
CAP	IPA	Not-For-Profit Corporation
VHS	IPA	For-Profit Corporation
MR/DD		
DES	NA	Governmental, State Agency

Source: Program Contractor Disclosure Statement in Year 9 CSDPs and bids.

NA Not Applicable

VHS has undergone some major changes in its internal organizational structure since the ALTCS contracts were signed for FY 91. Effective September 1, 1992, VHS terminated its management agreement with Health Management Associates (HMA) and formed its own management structure. HMA had managed the ALTCS program for VHS since 1988. HMA has filed a lawsuit against VHS for cancelling its management contract, which they believed to be in force until September 30, 1993. A decision on this case is not expected until fall 1993 or winter 1994. VHS also formed an AHCCCS acute care plan, Arizona Health Concepts (AHC), which received contracts as of October 1, 1992 to provide acute care services to AHCCCS eligibles in Mohave and Yavapai counties.

Contractor Performance

In evaluating the effectiveness of program contractors, it is important to consider the contractors' performance in implementing and managing their ALTCS responsibilities. If the contractors fail to carry out their responsibilities, either by not fully implementing program features or by doing so in an ineffective manner, it will not be possible to evaluate the true potential of the program contractor model of service delivery. This analysis documents the contractors' performance in three areas: subcontracting with qualified providers, monitoring the grievances and appeals process, and implementing internal information systems.

Subcontracting with Qualified Providers

The prepaid capitated financing arrangement under which the program contractors are paid by AHCCCSA creates incentives for the contractors to develop effective subcontracting processes. It is to a contractor's advantage to use the least-cost method of providing service to ALTCS eligibles. A contractor's success will be related to how well it is able to negotiate prices with the providers with whom it subcontracts. Development of a

comprehensive provider network enables the contractor to provide services at the lowest level of care that is appropriate.

An EPD contractor's provider network must be composed of three basic elements: LTC facilities (nursing facilities), home and community-based (HCB) services, and acute care services. This section first describes the processes used by the EPD contractors to procure providers. It then documents the payment methods that the contractors have arranged with their providers. Finally, it discusses the development of HCBS provider networks.

Procurement Process

Program contractors use a variety of methods to procure providers. The method used by each contractor for procuring nursing home, HCB, and physician services is presented in Table 3-3. To obtain nursing home and HCB services for their client groups, all of the county contractors (Maricopa LTC, PHS, and Pinal LTC) solicit competitive bids through an official RFP process. The three private contractors (VHS, APIPA LTC, and CAP) negotiate with nursing homes and HCBS providers in their respective counties.

Starting in Year 10, the process for negotiating rates with nursing facilities underwent substantial revision. Contractors complained that the previous process was time consuming and burdensome. For Years 7, 8, and 9, program contractors were required by AHCCCSA to submit negotiated provider rates in their CSDPs and bids. These rates were used by AHCCCSA to calculate each contractor's capitation rate. If AHCCCSA did not consider the submitted rates to be acceptable, contractors were requested to reduce the rates through the solicitation of best and final offers from providers, a process that was repeated several times.[3] Contractors were often not aware of the rate ranges that AHCCCSA was looking for until late in the process. Many contractors felt that they served primarily as an intermediary between AHCCCSA and the nursing homes. Under the revised process, individual nursing home rates are not subject to AHCCCSA approval. AHCCCSA awards each contractor a capitation rate

Table 3-3

METHODS OF PROVIDER PROCUREMENT BY CONTRACTOR AND TYPE OF CARE

	Nursing Homes	HCBS	Physician Services
EPD			
County			
Maricopa LTC	Competitive bid	Competitive bid	Arrangement with affiliated acute care plan
PHS	Competitive bid	Competitive bid	Arrangement with affiliated acute care plan
Pinal LTC	Competitive bid	Competitive bid	Competitive bid
Private			
APIPA LTC	Negotiation	Negotiation	Negotiation
CAP	Negotiation	Negotiation	Negotiation
VHS	Negotiation	Negotiation	Negotiation
MR/DD			
DES	Competitive bid	Competitive bid	Competitive bid

Source: Telephone communications with the program contractors, August 1991 and February 1993.

and contractors, in turn, negotiate rates that they believe are feasible within the capitated amount with each nursing facility.

In procuring physician services, Maricopa LTC and PHS rely on arrangements with their affiliated acute care plans. Pinal LTC uses a competitive bid process to secure physician services. For its first two years of operation, Pinal LTC contracted with Regional AHCCCS Health Plan (RAHP), an AHCCCS acute care plan, to provide acute care services to its ALTCS clients. As of October 1, 1992, Pinal LTC cancelled RAHP's contract and set up its own acute care network in which it has direct contractual arrangements with providers. Pinal LTC administrators thought this change would give them more control over the services provided as well as better utilization review and quality management. They also thought it could be more cost effective because it would remove a layer of administrative overhead expense.

To provide physician services to the ALTCS population in Coconino County, CAP contracts with the same physicians who contract with its affiliated acute care plan. Physicians are required to sign two contracts, one for services provided to enrollees in the acute care plan and one for services provided to those enrolled in ALTCS. VHS recruits physicians and physician groups throughout the state and negotiates contracts with them. Although VHS does not directly use its affiliated acute care plan to provide physician services, it contracts with many of the same physicians. APIPA LTC negotiates contracts with physician groups in Yuma County.

Provider Reimbursement

Payment arrangements for nursing home care, HCB services, and physician services are presented in Table 3-4. All of the program contractors pay nursing homes on a per diem basis. Historically, all of the program contractors paid per diem rates that were based on their own definitions of levels of care, i.e., a program contractor could have a set of rates for their defined levels of care. At least since FY 92, however, CAP has paid nursing

Table 3-4

PAYMENT METHODS BY CONTRACTOR AND TYPE OF CARE

	Nursins Homes	HCBS	Physician Services
EPD			
County			
Maricopa LTC	Per diem	Per unit	Contract with affiliated acute care plan
PHS	Per diem	Per unit	Contract with affiliated acute care plan
Pinal LTC	Per diem	Per unit	Capitation (PCPs) and fee schedule (specialists)
Private			
APIPA LTC	Per diem	Capitation	Fee schedule
CAP	Per diem	Per unit	Capitation (PCPs) and fee schedule (specialists)
VHS	Per diem	Per unit	Capitation (80% of PCPs) and fee schedule (20% of PCPs and specialists)
MR/DD			
DES	Per diem	Per unit	Capitation of acute care plans

Source: Telephone communications with the program contractors, August 1991 and February 1993.

facilities the same per diem for all ALTCS clients regardless of level of care.

With the exception of APIPA LTC, a17 of the contractors reimburse for HCB services on a per unit basis (e.g., hours, visits). APIPA LTC has a contract with Catholic Social Services to provide HCB services to its ALTCS members on a capitated basis.

Maricopa LTC and PHS have contracts with their acute care plans to pay for physician services. Primary care physicians (PCPs) in Pinal LTC's provider network receive a monthly capitation payment which is adjusted for Medicare coverage. Pinal LTC pays its specialty care physicians either the AHCCCS capped rate or a negotiated discount rate. CAP also capitates its PCPs and uses a fee schedule to reimburse its specialty care physicians. About 80% of VHS' PCPs are paid on a capitated basis. The remaining PCPs and the specialty care physicians are paid on a "discounted fee-for-service" basis. APIPA LTC pays for all of its physician services via a fee schedule.

Development of HCBS Provider Networks

According to the Year 9 CSDPs and RFPs, EPD program contractors were responsible for developing a provider network that consisted of the following 14 ALTCS-covered HCB services: adult day health services, attendant care, home delivered meals, home health aide, home health nursing, homemaker services, hospice services, personal care, medical equipment/supplies, respite care, occupational therapy, physical therapy, speech therapy, and transportation.

There were two major changes to the HCBS requirements since the contracts were signed in Year 9. Effective June 17, 1991, AHCCCS was granted approval from the Health Care Financing Administration (HCFA) to pay family members other than parents or spouses to provide attendant care services. Group respite service for EPD clients was added as of October 1, 1992. This service was approved for use as an alternative to adult day health services in

the following situations: 1) there are not enough EPD clients to support an adult day health center, 2) travel to an existing adult day health center is impractical because of long distances, 3) no adequate sites for an adult day health center are available, or 4) staffing for an adult day health center is not available.

The most recent complete information available for an assessment of the comprehensiveness of the HCBS provider networks that have been established are the HCBS Provider Network Analysis Forms/Corrective Action Plans submitted by the contractors in their Year 9 CSDPs and bids. On these forms, offerors identify any geographic areas with no provider or only one provider of a designated service type, as well as show short- and 1 ong-term strategies for resolving any weaknesses in their provider network. The Prepaid Medicaid Management Information System (PMMIS) is supposed to maintain information on provider networks. According to the Year 10 contract renewal documents, program contractors were required to submit an initial tape containing all affiliated providers on October 1, 1991 and subsequently provide quarterly provider network updates to AHCCCSA via computer tape. As of February 1993, however, it does not appear that this feature of the PMMIS has been implemented to the extent necessary to allow us to obtain such provider network information. AHCCCSA comments that the provider network feature has been implemented in PMMIS but is not currently actively used.

Year 9 HCB service availability by county is shown in Table 3-5. Services that were provided throughout a given county by at least two providers were coded available, per AHCCCSA's definition. Service availability was designated as limited if: there was only one provider of a designated type in the county, there were service providers in some parts of the county but not in others, or the service was available through an out-of-area provider. Services were coded as unavailable if there were no providers of a designated type available to provide services throughout the county. To develop this table, two assumptions had to be made. First, Maricopa LTC is assumed to have all required services even though it did not submit the required forms with its response. The narrative in its Year 9 CSDP suggested that all required services were offered. Second, APIPA LTC grouped six

Table 3-5

AVAILABILITY OF ALTCS HCB SERVICES FOR YEAR 9 BY CONTRACTOR AND COUNTY

	APIPA LTC	CAP	Maricopa LTC	PHS	Pinal LTC	VHS							
	Yuma	Coconfno	Maricopa	Pima	Pinal	Cochise	Gila	Graham	Greenlee	La Paz	Mohave	Navajo	Yavapai
Adult Day Health			A	A									L
Attendant Care		L	A	A	L								
Home Delivered Meals		L	A	A	L	L	L	L	A	L	A	L	A
Home Health Aide		L	A	A	L	L	L	L	A	L	A		A
Home Health Nursing	A	L	A	A	L	L	L	A	A	L	A	A	A
Homemaker		L	A	A	L	L	A	A	A	L	A	L	A
Hospice	L	L	A	A	L	A	A	A	A		A		A
Medical Equip./ Supplies	A	L	A	A	A	A	A	A	A	A	A	'A	A
Occupational Therapy	A	L	A	A	A	A					A		A
Personal Care		L	A	A	A	A	A	A	A	L	A	L	A
Physical Therapy	A	L	A	A	A	A	L	A	A	L	A	L	A
Respite Care		L	A	A	A	A	A	A	A	L	A		A
Speech Therapy	A	L	A	A	A	A	A			L	A	L	A
Transportation	A	L	A	A	L	A	A	L	L	A	A	L	A

Source: Year 9 HCBS Provider Network Analysis Form/Corrective Action Plans.

Blank Not available
A Available
L Limited

assumed to have service categories together and reported that these services had either no availability or limited availability. Lacking more information, each of these services was assumed to be unavailable.

The Year 9 responses on the HCBS Provider Network Analysis Forms show that the rural contractors tend to have more limitations in their HCBS provider networks than the urban contractors. All of the rural contractors reported at least one HCBS gap, in contrast to Maricopa LTC and PHS which reported no gaps. Rural areas tend to present a more difficult infrastructure than urban areas for the development of HCBS networks. Long travel distances and limited public transportation systems pose barriers to the provision of HCB services. The client pool may also be of an insufficient size to support some types of HCBS providers. Given these obstacles, it may not be appropriate to expect that each county would be able to supply the full range of services. Moreover, in counties with an especially small number of clients, it may be expensive to maintain such a comprehensive network.

Overall, the HCBS networks of rural contractors have been improving over time. In Year 9, VHS showed limitations for every HCB service with the exception of medical equipment/supplies in at least one county. There were no adult day health care programs (except in part of Yavapai County) or attendant care programs in the counties served by VHS. Subsequent discussions with VHS indicate that there have been improvements in its HCBS network since Year 9. For example, VHS now provides attendant care. Despite such improvements, VHS remains concerned about the perceived "volatility" of its HCBS network because of its inability to locate more than one provider for certain types of services in some counties. Pinal LTC reported seven services as being limited in availability and one service as unavailable in Year 9. As of February 1993, Pinal LTC reported that these gaps had been filled. According to a spokesperson from Pinal LTC, its staff expended considerable effort on network development. CAP reported limitations for almost every HCB service on its Year 9 Network Analysis Forms. Many of these were due to the lack of providers in one part of Coconino County that had only one ALTCS client. In recent conversations with CAP staff, they indicated that there have been improvements. For example, in Year 11 an attendant care program was added

which, as of February 1993, had been used by three to four members. APIPA LTC's network had the greatest number of reported gaps in Year 9 — eight out of 14 services were either limited or unavailable. However, there have been significant improvements in Yuma County since APIPA LTC entered the county in Year 9.

Grievances and Appeals

In evaluating contractors' performance, it is important to determine that they follow acceptable grievance procedures, as well as to analyze their level of grievance activity. Implementation of a grievance process helps to ensure the provision of quality health care. This process is especially important in managed care delivery systems, for which there has been concern about the incentives for underservice. A large volume of member grievances may indicate that members are not satisfied with the services they are receiving. Contractors with a large volume of provider grievances may find it difficult to retain their provider network.

Program contractors are required to have a grievance policy that clearly defines a client's rights regarding any adverse action by the program contractor. The Year 10 contract renewal document contained new minimum grievance and appeals requirements. According to the Year 10 standards, all grievances, except those challenging claim denials, must be filed with the program contractor within 35 days of the adverse action. All grievances concerning claim denials must be filed within 12 months of the date of service. Program contractors are responsible for the thorough investigation of each grievance, and final decisions must be made within 30 days of the filing date. Grievants who are not satisfied with the decision have 15 days from the date of the final decision to file an appeal with AHCCCSA. In such cases, the program contractor must forward all supporting documentation to AHCCCSA within five working days.

Program contractors may also attempt to resolve disputes informally through an alternative resolution process. Resolution must occur within 10

days from receipt of the dispute, after which time it must be treated by the contractor as an official grievance.

Program contractors were required to submit a signed Grievance and Appeals Requirements Certification Form with their responses to the Year 10 renewal CSDPs and RFPs. This form, which was included in the Year 10 renewal document, states that the program contractor has a grievance and appeals system that meets AHCCCSA minimum rules and regulations, as well as a written grievance policy for ALTCS members and providers. The Year 10 renewal document also contained a revised format for reporting information on formal grievances and cases that go through the alternative resolution process. Contractors must submit quarterly grievance reports to AHCCCS' Office of Grievance and Appeals within 45 days from the end of each quarter. Failure to do so subjects them to sanction.

Formal grievance activity in FY 91 and FY 92 is shown in Table 3-6 for each EPD contractor (in decreasing order of enrollment size). In both years, the rate of member grievances programwide was five member grievances per 1,000 ALTCS eligibles. The total rate of provider grievances decreased from 37 per 1,000 eligibles in FY 91 to 25 per 1,000 eligibles in FY 92.

There is considerable variation among the contractors for both types of grievances. In FY 91, the rate of member grievances ranged from a high of 36 per 1,000 eligibles reported by CAP to a low of zero reported by APIPA LTC. Provider grievances in FY 91 ranged from a low of 22 per 1,000 for Maricopa LTC to a high of 103 per 1,000 for VHS.

These figures may suggest that the contractors are reporting grievances in different ways. Examining the actual grievance and appeals reports submitted to AHCCCSA lends support to this idea. From our discussions with staff from AHCCCS' Office of Grievances and Appeals, it appears that the contractors do not have explicit guidelines on how to report or define various types of complaints.

Table 3-6

FORMAL GRIEVANCE ACTIVITY FOR YEARS 9 AND 10 BY EPD CONTRACTOR
(contractors are presented in order of enrollment size)

	Maricopa LTC	P H S	V H S	Pinal LTC	APIPA LTC	C A P	Total
Year 9							
Enrollment as of September 1, 1991	4,930	1,601	1,304	277	252	84	8,448
Member Grievances	11	15	4	7	0	3	40
Member Grievances per 1,000 Members	2.2	9.4	3.1	25.3	0	35.7	4.7
Provider Grievances	109	48	134	7	13	2	313
Provider Grievances per 1,000 Members	22.1	30.0	102.8	25.3	51.6	23.8	37.1
Year 10							
Enrollment as of September 1, 1992	5,784	1,805	1,482	342	295	93	9,801
Member Grievances	16	24	7	3	1	0	51
Member Grievances per 1,000 Members	2.8	13.3	4.7	8.8	3.4	0	5.2
Provider Grievances	94	21	92	4	39	4	244
Provider Grievances per 1,000 Members	16.3	11.6	62.1	11.7	132.2	43.0	24.9

Sources : AHCCCS Quarterly Grievance Report, FY 91 and FY 92; AHCCCS ALTCS Enrollment Summary Report, 9/1/91; and AHCCCS Enrollment/Eligibility Status Report, 9/1/92.

Internal Information Systems

Internal information systems are necessary to efficiently manage resources in a managed care delivery system and to ensure the provision of quality services. Based on our discussions with the program contractors, they appear to recognize that timely information, e.g., information that tracks network performance and utilization, is essential to managed care. The extent to which they have successfully implemented such systems and developed their reporting capabilities, however, shows substantial variation.

In August 1992, the LRA project team conducted a site visit to Arizona to discuss LTC encounter data with the program contractors. Questions were also asked about their data processing systems. One-half day was spent with each of the contractors except APIPA LTC. Information obtained during our site visit indicates that two of the contractors (VHS and PHS) appear to have well-functioning data systems. One contractor (CAP) may have reasonable data in some years but not in others.[4] Maricopa LTC's and Pinal LTC's data systems appeared to be experiencing substantial problems. Representatives of APIPA LTC were not available to meet with the team during the August 1992 site visit, but during a subsequent site visit a short meeting at APIPA LTC indicated that there are likely no substantial problems with its systems.

Most of the contractors do not process all of their data internally. PHS has a contract with Information Network Corporation (INC). APIPA LTC subcontracts with GTE Services. CAP and Pinal LTC use a small consulting company, Health Care Systems Development. Maricopa LTC processes some of its data in-house and subcontracts the rest. VHS has its own hardware but leases a software system.

One problem faced by the program contractors is the lack of incentive for capitated providers to submit required encounter information. This issue is addressed by the contractors in a variety of ways. APIPA LTC and VHS, for example, audit providers by reviewing the reasonableness of their use rates. VHS also tries to motivate providers to submit encounters by pointing out the

link between current reported utilization and future payments. All seem to believe that their efforts improve provider encounter reporting.

The extent of internal reporting activities varies by program contractor. Consistent across all contractors is a preference to rely on internal information rather than on the data submitted to AHCCCSA for reporting purposes. In general, case management reports receive more attention by the contractors than utilization reporting. The contractors with more sophisticated data systems indicated that they rely on utilization reports for decision making. Other contractors indicated that they were just beginning to develop capability in this area. Although we have not received any sample reports for examination, hospital and physician utilization patterns seem to be the areas of utilization reporting receiving the most attention by the contractors.

Relationship with AHCCCSA

Program contractors, whether county or private organizations, agree to accept AHCCCSA oversight of program implementation. How AHCCCSA implements program features can affect a contractor's ability to operate its organization efficiently and effectively. It also influences participation in the ALTCS program.

In general, AHCCCSA and the program contractors share a common perception that the relationship between them has improved over time. Many contractors mentioned an evolution from an "us versus them" mentality that existed at the program's inception to a more cooperative relationship, This is not to say that there is not room for additional improvement. For example, many of the contractors expressed their disappointment at not being consulted in the preadmission screening (PAS) instrument redesign effort.

This section examines two important areas in which AHCCCSA and the program contractors have considerable interaction: contract negotiations and utilization and case management reporting.

Contract Neaotiations

Contract negotiations with the EPD contractors are conducted by AHCCCS' Division of Business, Finance, and Research. Presented below are three issues that generated debate between AHCCCSA and the contractors during the round of contract negotiations that took place for the Year 11 contract renewals: the percent limit on use of HCB services, the acute care costs of HCBS clients, and the interest deduction that AHCCCSA incorporated into the capitation calculation.

HCB Services

Since the beginning of ALTCS, the percent of ALTCS EPD members that could be enrolled in HCB services has been constrained by HCFA. HCFA imposed the percent limit out of concern that the PAS tool would not effectively target people at risk of institutionalization, and thus would enable low-risk clients to receive HCB services. HCFA was also concerned that the availability of HCB services would increase the number of people receiving services, if people with activity limitations who are unwilling to be admitted to a nursing home applied to the program so that they could receive HCB services (the "woodwork effect"). Since the beginning of the program, AHCCCSA has advocated for elimination of this constraint. AHCCCSA felt that HCB services offered more cost-efficient care and that the PAS instrument effectively identified the sickest beneficiaries for eligibility.

The percentage of enrollees that could receive HCB services (referred to as the HCBS cap) has been increasing steadily with each program year. As of October 1, 1992 (Year 11) the maximum level of clients that a contractor could place in HCB services was 30%. Many of the private rural contractors have been somewhat reluctant to increase their HCBS cap, however, and arriving at a percentage that is agreeable to both AHCCCSA and the contractors has been the subject of intense negotiations.

Part of the reluctance to contract for a larger HCBS cap stems from the HCBS payment methodology. Program contractors' capitation rates reflect a weighted average of their assumed HCBS and institutional client mix. If a contractor's actual percent of HCBS clients is more than 0.5 percentage points greater than the assumed HCBS mix, AHCCCSA will recoup the excess payments (the difference between the institutional and HCBS rates times the number of people who exceed the assumed HCBS percent by more than 0.5 percentage points) from future capitation payments. Contractors get to keep the institutional rate for the 0.5 "window" above the assumed HCBS mix. If a contractor has fewer HCBS clients than the assumed level, AHCCCSA makes no adjustment to its payments. This means that at the margin the contractor is receiving'a-lower HCBS reimbursement rate for a high-cost, institutionalized person. Thus, a contractor that agrees to a large HCBS cap is exposed to financial risk if it fails to place enough clients in HCBS settings.

Some of the program contractors do not like this payment methodology because they perceive it to involve unlimited "downside" risk and small or no incentives for placing additional members in HCBS settings. This methodology would seem to provide incentives for private contractors to negotiate as small a HCBS cap as AHCCCSA will agree to. Because it will be reimbursed for institutional care rates for a large percentage of its population, the amount collected on an interim basis will be greater the lower the HCBS cap. If more people are placed in HCBS care, then the contractor will have to give money back to AHCCCSA. If the assumed HCBS mix is higher than the actual mix, then the contractor loses money because no reconciliation will be done. One private contractor commented that it would prefer to see a risk-sharing range, for example, a range of plus or minus three percent. Another contractor stated a strong preference for one capitation rate regardless of the service setting with no reconciliation.

Given the HCBS provider network constraints in rural areas, this payment methodology may be particularly unsettling for rural contractors. Rural contractors may have legitimate concerns about being able to place additional clients in HCBS settings. Even contractors that have established comprehensive HCBS networks may remain concerned about the depth of their

networks. For example, a contractor with only one attendant care provider may be able to meet the current service needs of its population, but should something happen to that provider it may be difficult or impossible for the contractor to maintain the required percentage of clients in HCBS care.

Allowing program contractors to retain a portion of excess payments was a new feature introduced by AHCCCSA for Year 10. Starting in Year 11, this feature was restricted to urban contractors who agree to an HCBS cap of at least 25% and rural contractors who agree to an HCBS cap of at least 22%. In a letter to HCFA, AHCCCSA characterized this change as a "rate incentive" that was "...included in the ALTCS Comprehensive Services Delivery Package (CSDP) to encourage Contractors to increase the proportion of members placed in Home and Community Based Services."[5] If AHCCCSA's intent was to use this feature as a bargaining tool to encourage urban and rural contractors to negotiate cap levels of at least 25% and 22% respectively, then it appears to have achieved its objective. Once a contractor has reached more than 0.5 percentage points of their assumed mix, this change should not affect their placement decisions.

AHCCCSA also introduced two changes for Year 11 that relate to case management costs associated with HCBS clients. Program contractors whose actual HCBS mix exceeds their assumed HCBS mix by more than 0.5 percentage points will receive a retrospective increase in the case management portion of the capitation rate, if their HCBS cap is at least 25% (urban) or 22% (rural). Another change is that contractors with an HCBS cap of at least 25% will receive a client management supplemental of $3.14 per member per month to compensate them for the additional case management costs related to HCBS clients. Previously, contractors had indicated reluctance to accept a higher HCBS cap because of what they perceive to be additional case management costs.

Pinal LTC is the only program contractor that has contracted for the maximum HCBS cap the past two years (see Table 3-7).[6] In fact, Pinal LTC requested and received permission to exceed the 30% cap in Year 11. Pinal LTC's HCBS cap is 35% for Year 11. The urban contractors, Maricopa LTC and PHS both had a 25% HCBS cap in Year 11, and 22% and 21% respectively in Year

Table 3-7

HCBS CAP PERCENTAGE FOR AHCCCS YEARS 7-11
BY PROGRAM CONTRACTOR

	Year 7	Year 8	Year 9	Year 10	Year 11
APIPA LTC	NA	NA	18%	18%	22%
CAP				20	22
Maricopa LTC	10%	15	18	22	25
PHS	10	13.5	18	21	25
Pinal LTC	NA	NA	18	25	35
VHS	10	15	18	22	23
Program-wide Maximum	10	15	18	25	30

Source: ALTCS HCBS CAP Tracking Reports.

NA Not a program contractor during this period

10. According to AHCCCSA, the level of the HCBS cap did not seem to be a major concern for the urban contractors during negotiations. Of the private contractors, VHS agreed to the largest HCBS cap in Years 10 and 11, 22% and 23% respectively. APIPA LTC and CAP both negotiated cap levels of 22% for Year 11, although CAP contracted for a larger HCBS cap (20%) in Year 10 than did APIPA LTC (18%).

Acute Care Costs for HCBS Beneficiaries

Another issue that was raised during the negotiations pertains to the acute care portion of the capitation payments. As ALTCS has been moving toward a greater percentage of beneficiaries in HCBS care, no adjustment has been made to the acute care capitation rate. One program contractor (PHS) feels strongly that its HCBS users have more acute care service costs than its institutional clients. At least one other contractor shares the sentiment that there is a cost differential but is not sure of its magnitude or direction. AHCCCSA has indicated that its experience with about 100 beneficiaries in its FFS network in Santa Cruz County does not support PHS' contention of larger acute care service costs for HCB beneficiaries than for those in institutional settings. No study of this issue was available for review, and consequently, we cannot verify these impressions. AHCCCSA has indicated it is investigating this issue.

Interest Deduction

During the Year 11 negotiations, AHCCCSA introduced an interest deduction for funds received by program contractors prior to payment of their ALTCS providers. Capitation payments paid to the contractors were reduced by 0.75% to account for the presumed lag between the contractors' receipt of capitation revenue and payment of bills for ALTCS eligibles. This deduction was based on the assumption of a six percent interest rate and an average of 45 days having the cash on hand before invoices are paid. AHCCCSA's justification for the interest deduction is that the contractors do not have

capitation arrangements with their providers, and consequently that they get a float of at least 45 days.

Many of the contractors we spoke with expressed displeasure with the interest deduction. In particular, they questioned the assumptions behind it. Many contractors say that they pay LTC providers very quickly. One rural contractor claimed that it pays most nursing homes on a monthly basis within 15 days of receipt of the capitation payment from AHCCCSA for that month, and that one nursing home is occasionally paid in advance. Another rural contractor maintains that it typically pays nursing homes within 15-20 days of the date when the nursing home's claim is submitted.

Utilization and Case Manaoement Reportinq

Program contractors are responsible for providing accurate and appropriate data to enable evaluation of the ALTCS program. As stated in the original RFPs and CSDPs, "the necessity of accurate and timely data is a critical feature of the ALTCS program." This section examines two areas of data reporting — utilization and case management. These and other PMMIS reporting issues are discussed further in Chapter 7 of this report.

Utilization Reoortinq

Since the program's inception, HCFA has mandated the collection of 100% encounter data as a program requirement. To become a program contractor, an organization must have a system that is capable of gathering, processing, and reporting all encounter data.

Most, if not all, of the contractors recognize that encounter data can provide a useful and essential management tool. The more sophisticated plans indicate that they use encounter data internally in their operations and planning. However, many of them also report that the internal data that they

use is not necessarily the same as the encounter data in the AHCCCS data files.

To determine whether program contractors are meeting their utilization data reporting requirements, AHCCCSA compares encounters in the AHCCCS encounter data files to data submitted by the program contractors. Contractors are required to submit data (referred to by AHCCCSA as claims data) that have been reformatted according to AHCCCSA specifications for these validations. AHCCCSA performs two long-term care data validations: the Home Health, Therapy, and Personal Care Services Data Validation and the Nursing Home Data Validation. During our August 1992 site visit, several of the program contractors with more sophisticated data processing systems expressed their opinion that the data validation comparison does not really test the encounter data quality. Because these contractors know what encounter data was sent to AHCCCSA, it is not difficult for them to assure that the same data is on the tape that is prepared for validation purposes. AHCCCSA contends that this perception is inaccurate because the validations also compare the volume of claims data to each contractor's enrollment information.

Some of the contractors indicated that they believe that the rigor of the data edits are a problem. With the implementation of PMMIS, the number of edits increased which, in turn, resulted in a substantial increase in the number of pended encounters. Pended encounters take considerable energy to resolve. Some contractors feel that given resource constraints, the cost effectiveness of each edit should be considered. Edits that are important for utilization and/or quality review should be retained, and those of trivial importance should become candidates to delete.

The contractors acknowledged that some of their dissatisfaction may stem from the perception that the data that AHCCCSA collects is not shared with them. The contractors are supportive of the idea of collecting data; but they do not feel that the information that is returned from AHCCCSA compensates them for the effort that they put into data collection. The more sophisticated plans have expressed a strong interest in seeing comparison utilization statistics across contractors, including AHCCCSA's fee-for-service

network. AHCCCSA has indicated that it plans to release a data book containing such information as part of the Year 12 RFP process.

Case Management Reporting

Case managers are required to enter a service plan for each client into the AHCCCS PMMIS Client Assessment and Tracking System (CATS). The service plan includes information on authorized services, begin and end dates, total units of service, and authorized provider(s). In addition to establishing an initial plan, case managers are required to periodically update the plan and enter new information into CATS.

Most program contractors have their own case management information systems. One plan (Pinal LTC) manually enters case management information into two separate systems, an internal system and CATS, which involves a significant duplication of effort.

Some AHCCCSA staff seem to believe that the CATS data might be able to be used to calculate actual service use. Several AHCCCSA personnel said that they believed that the CATS data was routinely updated by the contractors. This view of the data's accuracy for a utilization analysis does not appear to be shared by the contractors. Several contractors indicated to us that they may increase CATS authorizations to reflect actual service use if use exceeds the authorized level, however, no contractor reduces authorizations if the actual use is below the authorized amount. At least one program contractor never modifies its CATS data.

In general, the contractors perceive that they get very little, if anything, back from the effort they put forth submitting the CATS data. Most would like to see some useful reports prepared by AHCCCSA from the data. Some also mentioned an interest in having on-line access to CATS data.

Deoartment of Economic Security

DES has been the program contractor for the MR/DD population throughout the state since the beginning of ALTCS. Although DES' roles and responsibilities are essentially the same as those of the EPD contractors, there are some important differences between DES and the EPD contractors.

The most obvious difference between DES and EPD contractors is the populations that they serve. The MR/DD population has service needs that differ from those of the EPD population. These needs are often served in different settings than those used most frequently by EPD beneficiaries. For example, only a small percent of DES' clients are institutionalized, about four percent as of October 1992. In contrast to the EPD contractors, DES is not subject to a limit on the number of clients that can be placed in an HCBS setting.

DES provides services to beneficiaries throughout the state. Because of this, DES is faced with a diversity of issues. For example, DES must deal with the special concerns applicable to both rural and urban areas. DES also serves a large population (6,208 ALTCS beneficiaries as of January 1993). In addition to serving ALTCS clients, DES serves an approximately equal number of non-ALTCS MR/DD clients.

DES had a provider network in place prior to the implementation of ALTCS, but this network did not include acute care service providers. The decision to bundle LTC and acute care services in ALTCS forced DES to develop acute care capabilities. In contrast to most of the EPD contractors, DES is not directly affiliated with an AHCCCS acute care plan. To provide acute care services, DES contracts with health plans which in turn contract with providers. Thus, there is an additional administrative layer for the MR/DD population that is not present for the EPD population.

Finally, DES is the only contractor that is a state agency. As a sister agency of equal status, DES has a unique relationship with AHCCCSA. This relationship creates formal and informal differences in AHCCCSA's authority in

its oversight of ALTCS. For example, the relationship between DES and AHCCCSA is governed by intergovernmental agreements (IGAs) rather than formal contract.

The discussion of DES that follows will focus on the three major evaluation issues of this chapter: contractor selection, contractor performance, and the relationship between DES and AHCCCSA.

Contractor Selection

DES is the sole program contractor for ALTCS-eligible persons with mental retardation or developmental disabilities. DES is required by law to respond to AHCCCSA's CSDP for the provision of ALTCS services to the state's MR/DD population, and AHCCCSA cannot issue this CSDP to any other entities. DES responded to a CSDP in Years 7 and 9 of the program and renewal documents in Years 8, 10, and 11. The renewal documents for Years 10 and 11 were very similar to the ones AHCCCSA issued to the EPD contractors.

Contractor Performance

In this section, we document DES' performance in the three areas that were reviewed earlier for the EPD contractors: subcontracting with qualified providers, monitoring the grievances and appeals process, and implementing internal information systems.

Subcontractins with Qualified Providers

All DES contracting processes are carried out in accordance with the Arizona Procurement Code. As it did prior to ALTCS, DES prepares and issues annual RFPs soliciting competitive proposals from potential providers. There are two major solicitations — one for LTC providers and one for acute care health plans.

To attract proposals, DES sends out notices to all parties on the Bidder's List, which is compiled and maintained by the State Procurement Office. Notices are also advertised in newspapers throughout the state.

Upon receipt, proposals go through a first-level review by DES staff. Proposals are deemed "potentially acceptable" based on their basic responsiveness to the RFP, i.e., meeting timeliness and structural requirements. Second-level reviews assess an offeror's capability to deliver proposed services in accordance with RFP terms and conditions.

Best and final offers are solicited from those offerors who are determined to have a technically-acceptable proposal. Contracts are awarded to offerors with proposals that are most advantageous to the state, taking into consideration those evaluation factors set forth in the RFP. If needs are not met through the annual RFP process, DES can issue specialized RFPs which could, for example, be targeted at a specific service in a given geographical region.

DES has two exemptions to the Arizona Procurement Code's regulation that contracts be awarded through a competitive bid process. The first is that foster care families do not have to contract through the formal RFP. The second exemption allows DES to contract with Title XIX providers between contract cycles. For example, if the family of a MR/DD client locates a provider that does not have a contract with DES, DES may enter into a contract without waiting for the next RFP to be issued. This exemption applies only to the procurement of Title XIX providers and is only temporary. It was initially approved for two years, but was granted a one-year extension expiring in October 1993. According to DES staff, this exemption is critical to its LTC procurement process.

Within DES, responsibility for implementation of ALTCS is located in the Division of Developmental Disabilities (DDD). Provision of long-term care and acute care services are handled by separate offices within DDD. Long-term care services fall under the domain of Long-Term Care Operations and acute care services are overseen by Managed Care Operations. Consistent with the

way in which DES has divided the provision of acute and LTC services organizationally, they are discussed separately throughout this section.

Long-Term Care Providers

The Long-Term Care Operations office is responsible for establishing and monitoring the LTC provider network, which includes HCB and institutional services. It has divided responsibilities between the central office in Phoenix and six district offices. The six districts of the state are: 1) Maricopa County; 2) Pima County; 3) Apache, Navajo, Coconino, and Yavapai counties; 4) La Paz, Mohave, and Yuma counties; 5) Gila and Pinal counties; and 6) Cochise, Graham, Greenlee, and Santa Cruz counties. Most LTC providers deal with DES at the district level. However, providers with contracts that exceed $700,000 per year (informally called the "700 Club" by DES) are handled directly by DES' central office. According to DES, these 34 or so providers constitute roughly 75% of DES' total payment authorizations to LTC providers.

This section examines the subcontracting practices used by the Long-Term Operations office for the provision of LTC services, including the procurement process, provider reimbursement methods, and development of provider networks.

Procurement Process

DES does not make a distinction between ALTCS and non-ALTCS providers in its LTC procurement process. Contracts are awarded for the state fiscal year (SFY) which extends from July 1 to June 30 of the following calendar year. The SFY 93 solicitation for LTC providers (RFP release #E-DDD-93003) was dated January 21, 1992. Proposals were initially due to DES on March 3, 1992, but the deadline was extended to March 10, 1992. DES announced four pre-proposal conferences — two in Phoenix on January 31, one in Flagstaff on February 5, and one in Tucson on February 6 — to-clarify contents of the RFP and bring up apparent omissions and/or discrepancies.

Contained in the RFPs are service specifications for each advertised service and the geographical area(s) in which they are being sought. The most recent solicitation was for the following services: adult day services (day treatment and training, employment related programs); residential services [habilitation (residential), nursing facility care, room and board, intermediate care facility for the mentally retarded (ICF/MR)]; child day services (day treatment and training); and support and professional services [habilitation (home), home health aide, hospice, housekeeping chore/homemaker, medical support services, home nursing, occupational therapy, personal care, physical therapy, professional/specialty services, respite, speech therapy, transportation]. Service specifications include a description of the service and the unit of service to be used in billing.

Contract awards for SFY 93 were made on the basis of a potential offeror's score on a 1,000-point evaluation tool. For each scored item, the evaluator described the offeror's response and then gave it a numerical score. As per the RFP, a provider's demonstrated experience received the highest weight followed by the offeror's technical ability to perform the work and the cost. In scoring the offeror's experience and expertise (250 points), the evaluator considered the length of time in operation, the number of similar contracts, etc. Personnel expertise (250 points) was scored on the basis of the education level of key staff, certification/licensure, appropriateness of resumes and/or job descriptions to the performance of the tasks proposed, etc. Four hundred points were assigned to the evaluator's assessment of the offeror's ability to perform the work. Finally, the bid's cost was scored using a 100-point maximum. These evaluations were done again after the best and final offer. Two meetings to discuss the proposals, one in early May and one in late May, were held between DES and those offerors in the best and final round.

Recognizing that the contracting process could be more efficient, DES made four major changes for SFY 93. One change was a reduction in the number of service specifications from 46 to 18. To develop these new specifications, DES evaluated all of the 46 service specifications according to objective, and grouped services that had similar objectives together. For example, adult day

care, rehabilitation, instructional services, developmental day training, day treatment and training were folded into one service specification called "day treatment and training."

The second change applies to providers that are members of the "700 Club". To reduce the number of contract amendments, their contracts were written for a flexible number of units. In the past, if the number of units required exceeded the fixed number of units stated in the contract, DES needed to formally amend the contract before additional services could be provided.

Another change in the contracting process is DES' desire to take greater advantage of the renewal clauses in its contracts. Although a renewal option has been available, DES has generally not exercised it. Under a renewal contract, contractors with acceptable performance can annually renew their contracts for up to four years. Whether or not a contract is renewed depends on the continued need for service, the availability of funds, the contractor's success in meeting the conditions of the contract, and the contractor's financial stability.

The final major change relates to rate negotiations. Traditionally, all LTC rate negotiations with prospective providers have been conducted at the district level. District Managers receive a budget allocation based on their client population. As of the SFY 93 solicitation, contracts of "700 Club" members are negotiated by a centralized team. Written documentation of this new process is not available from DES.

Cost information from a variety of sources is utilized by DES in rate negotiations with LTC providers. Offerors are required to prepare and submit an Itemized Service Budget with their RFPs. This form provided information on the provider's cost structure and showed actual current expenses for SFY 92 (if the offeror had a contract with DES in SFY 92) and proposed expenses for SFY 93. DES also uses a rate-setting model to develop cost estimates for different clients in different facilities based on client level of need and size of the facility. These estimates serve as guidelines in DES' rate negotiations with LTC providers.

DES and "700 Club" providers negotiated a "blended" reimbursement rate for SFY 93. During the negotiations, providers budgeting higher costs than other providers serving beneficiaries with similar levels of client disability in 1991 had to justify these costs. DES agreed to the higher rate only for those providers that could show that they had legitimately higher input costs. During this process, DES sought and received an exemption from the State Procurement Officer, which permitted them to have a second round of best and final offers, because DES did not find any of the rates that were submitted in the initial best and final round to be acceptable.

Provider Reimbursement

DES reimburses its LTC service providers a fixed dollar amount per unit of service. The SFY 93 RFP issued by DES to potential LTC service providers explicitly defines the unit of service on which a provider will be paid in the service specifications.

According to the service specifications, the unit of service for the following services were:

Service Name	Service Unit
Day Treatment and Training	Hour
Employment-related Program	Hour
Habilitation (Home)	Hour
Habilitation (Residential)	Day
Home Health Nurse	Visit = One Hour
Home Health Aide	Visit = One Hour
Hospice	Hour
Housekeeping Chore/Homemaker	Hour
ICF/MR	Day
Medical Support Services	Hour, Item, or Test/Procedure
Nursing Facility	Day
Occupational Therapy	Treatment = One Hour

Personal Care	Hour
Physical Therapy	Treatment = One Hour
Professional/Specialty Services	Hour
Respite	Hour
Speech Therapy	Treatment = One Hour
Transportation	Trip (One-way)

DES implemented a new payment system for "700 Club" providers effective October 1, 1992. Under this system, each provider is prospectively paid a blended capitation rate. This rate applies to all of a provider's DES clients across all of the provider's settings of a given service type regardless of individual client disability. An individual provider's rate is based on the disability level of its clients during 1991 and will be adjusted annually. Previously, these providers were paid a rate that reflected the actual level of need of the clients that were served.

A potential concern about this new payment system is that providers may have incentives to seek light-care clients. Providers that lower their average client disability level may be able to improve profits. If necessary, DES has said that it will penalize providers that refuse highly-challenged clients by denying payment for authorized vacancies, i.e., patient vacations with family. As of January 1993, this penalty had not yet been levied, but DES staff reported that it had been threatened on at least two occasions. A discussion of potential problems associated with the blended rate payment system as well as the monitoring mechanisms that DES is implementing is presented in Chapter 5.

Beginning in July 1, 1992, members of the "700 Club" receive 80% of their reimbursement for authorized beneficiaries at the start of each month. This amount is then reconciled to actual claims at the month's end when DES receives the provider's invoice.

Although we requested it, DES was unable to provide written documentation of the new blended payment system or the negotiation process. At present, no written report has been prepared by DES or William M. Mercer,

Inc. (Mercer), the consulting firm that designed the system. DES has indicated, however, that 12 of its staff were involved in the negotiations and have hands-on experience concerning how the system works.

For the remainder of the DES providers, DES is in the process of standardizing claims processing across the districts to accelerate payment. According to the contract, providers' bills are supposed to be paid within 30 days of receipt by the DES district office. However, DES has experienced difficulties in consistently meeting this deadline. Payment delays are especially common at the beginning of the fiscal year when changes are also being incorporated into the data system. DES was unable to give us precise estimates of the actual payment lags because the date received is not recorded on the claims. DES staff indicated that they plan to incorporate a log-in mechanism for claims.

Development of Provider Networks

For the most part, DES is required to provide the same range of LTC services as the EPD contractors. Exceptions are adult day health, group respite services, and home-delivered meals, which are not covered services for MR/DD beneficiaries, and developmentally disabled day care which is an HCB service available only to MR/DD beneficiaries. DES is also responsible for the provision of care in ICF/MRs.

In Year 11, DES began to cover attendant care services on a limited basis. DES sought and received a waiver of the statewide requirement allowing DES to pilot attendant care in one rural and one urban area. The stated intent for doing so is to develop cost-effective standards prior to statewide implementation. DES anticipated that 125-150 clients would be served under the pilot program. Upon implementation, many beneficiaries who currently receive personal care services will likely switch to attendant care services, which DES believes can be provided at a lower cost.

In SFY 92, DES contracted with long-term care providers for 46 types of services (see Table 3-8). Effective July 1, 1992, these 46 services were collapsed into 18 broader categories. These categories are: day treatment and training, employment related programs; habilitation (home), habilitation (residential), home health aide, home nursing, housekeeping chore/homemaker, ICF/MR, medical support services, nursing facility care, occupational therapy, personal care, physical therapy, professional/specialty services, respite care, room and board, speech therapy, and transportation. DES provided the evaluator with the total number of certified providers as of the beginning of SFY 93 for seven of these services: 706 habilitation providers, 658 respite care providers, 332 personal care providers, 203 homemakers, 192 day treatment and training providers, 143 transportation providers, and six providers of home health nursing.

To ensure that the HCBS provider network meets the needs of the MR/DD population in each county, DES is required to submit quarterly updates of HCBS provider network gaps to AHCCCSA until it is determined that such reports are not needed. In this report, DES is also required to discuss short- and long-term actions that are planned to address existing gaps.

Counties with less than two providers for a given HCB service are said to have a service gap. As shown in Table 3-9, the most recent available provider gap report for the period January 1 - March 31, 1992, shows gaps in every rural county (Gila and Cochise counties were not included in this report). According to DES, "these 'gaps' are not problematic since in most situations there is no service demands."[7] For example, DES believes that home health services are only infrequently needed by the ALTCS MR/DD population. Service availability in the urban counties, Maricopa and Pima, was consistent with the experiences of the EPD contractors in those counties in that there were no reported gaps.

Comparison of the HCBS Provider Network Analysis Form filed by DES on April 11, 1991 to the quarterly provider gap report for the second quarter of FY 92 shows that the DES HCBS provider network has improved. DES successfully filled all of the gaps in homemaker services (in Apache, Graham, Greenlee,

Table 3-8

DES LONG-TERM CARE SERVICES* FOR SFY 92 and SFY 93

SFY 92 Service Name	SFY 93 Service Name
Adult Day Care/Adult Day Health Care	Day Treatment and Training
Rehabilitation Instructional Services	Day Treatment and Training
Day Treatment and Training	Day Treatment and Training
Job Training	Employment Related Program
Job Development and Placement	Employment Related Program
Supported Employment	Employment Related Program
Alternative Communication Training	Habilitation (Home)
Home Management Training	Habilitation (Home)
Personal Living Skills	Habilitation (Home)
Habilitation	Habilitation (Residential)
Home Health Aide	Home Health Aide
Home Nursing	Home Nursing
Housekeeping Chore/Homemaker	Housekeeping Chore/Homemaker
ICF/MR	ICF/MR
Medical Support Services	Medical Support Services
Medication, Medical Supplies, and Nutritional Supplements	Medical Support Services
Adaptive Aides and Devices	Medical Support Services
Clinical Laboratory Services	Medical Support Services
Adaptive Aides and Devices, Repair of	Medical Support Services
Nursing Facility Care	Nursing Facility Care
Occupational Therapy	Occupational Therapy
Personal Care	Personal Care
Physical Therapy	Physical Therapy
Preschool Supplemental Services	Professional/Specialty Services
Case Management	Professional/Specialty Services
Parenting Skills Training	Professional/Specialty Services
Nutrition, Education and Intervention	Professional/Specialty Services
Assessment Services	Professional/Specialty Services
Counseling	Professional/Specialty Services
Consultation	Professional/Specialty Services
Parent Aid Services	Professional/Specialty Services

Table 3-8 (Concluded)

DES LONG-TERM CARE SERVICES* FOR SFY 92 and SFY 93

Dental Services	Professional/Specialty Services
Home Recruitment, Study, and Supervision	Professional/Specialty Services
Coordination	Professional/Specialty Services
Volunteer Coordinator Service	Professional/Specialty Services
Audiology	Professional/Specialty Services
Socialization and Recreation	Professional/Specialty Services
Physician Services	Professional/Specialty Services
Staff Development and Training	Professional/Specialty Services
Peer Self-Help Groups	Professional/Specialty Services
Basic Education	Professional/Specialty Services
Respite	Respite
Room and Board	Room and Board
Speech Therapy	Speech Therapy
Transportation	Transportation

Source: Services Revision, Effective July 1, 1992 - DES, October 1992.

* Includes both ALTCS and non-ALTCS services

Table 3-9

AVAILABILITY OF ALTCS SERVICES FOR DES DISTRICTS
FROM 1/1/92 TO 3/31/92 BY SERVICE

	District 1	District 2	District 3			
	Maricopa	Pima	Apache	Navajo	Coconino	Yavapai
Day Treatment and Training	A	A	A	A	A	A
Habilitation	A	A	A	A	A	A
Home Health Aide	A	A				
Home Health Nursing	A	A	A	A	A	L
Occupational Therapy	A	A	A	A	L	A
Personal Care	A	A		A	A	A
Physical Therapy	A	A	A	A	A	A
Rehabilitation Instructional Service	A	A	A	A	A	.A
Speech Therapy	A	A	A	A	A	L
Transportation	A	A	A	A	A	A

Table 3-9 (Concluded)

AVAILABILITY OF ALTCS SERVICES FOR DES DISTRICTS
FROM 1/1/92 TO 3/31/92 BY SERVICE

	District 4			District 5		District 6			
	La Paz	Mohave	Yuma	Gila*	Pinal	Cochise*	Graham	Greenlee	Santa Cruz
Day Treatment and Training	L	A	L		A		A	A	A
Habilitation		A	A		A		A	A	A
Home Health Aide	L	L	L		L				
Home Health Nursing			L		A		A	A	A
Occupational Therapy	L	L	L		A		L	L	L
Personal Care		L			A		A	A	A
Physical Therapy	L	A	L		A		L	L	L
Rehabilitation Instructional Service	L	A	A		A		A	A	A
Speech Therapy	L	A	L		A				
Transportation					A				

Source: DES/DDD Provider Gap Report for the period 1/1/92 - 3/1/92, submitted to AHCCCS May 1, 1992.

* Forms not filed for this county
Blank Not Available
A Available
L Limited Availability

la Paz, Santa Cruz, and Yuma counties). With the addition of providers for habilitation services in Santa Cruz County and for DD day care in Santa Cruz, Graham, and Greenlee counties, La Paz was the only county remaining with one or no providers for each of these services. The addition of personal care providers in Graham, Greenlee, and Santa Cruz counties also helped improve service availability. Apache, Coconino, and Navajo counties, which had no home health nurses available as of April 1991, added home health nursing providers. Finally, gaps for home health aides in Pima, Maricopa, and Navajo counties were also eliminated.

Two of the more chronic service availability problems seem to be for therapy services (physical, speech, and occupational) throughout the state and for transportation in rural areas. DES has employed a number of strategies over the years to expand its network of therapists. One approach is to issue supplemental RFPs. Another strategy is to involve public schools in the provision of services. DES has also introduced reimbursement for travel for therapists who are willing to travel outside of their county to deliver services. A fourth strategy is to recruit therapists from bordering regions of New Mexico.

According to DES staff, some of the hindrances in attracting providers include the third party liability (TPL) and other paperwork requirements. DES providers are responsible for determining TPL and to seek payment from third parties prior to submitting a claim to DES. DES staff indicated that removing the TPL requirements from the providers would increase the number of providers willing to participate. However, moving the TPL function to DES would require additional funding that is not presently available.

Acute Care Providers

The Managed Care Operations office is responsible for administration of the delivery of acute medical services. The Managed Care Operations office negotiates contracts with health plans to provide acute care services to MR/DD beneficiaries on a capitated payment basis. In counties with contracted

health plans, the Managed Care Operations office provides technical assistance and monitors the delivery of services. In counties without contracted health plans, the Managed Care Operations office runs a fee-for-service network of providers.

The following sections document the subcontracting practices used by the Managed Care Operations office for the provision of acute care services to ALTCS beneficiaries with developmental disabilities.

Procurement Process

The process by which DES contracts with acute care health plans generally parallels that used for LTC providers. One difference is that contract renewals are commonly used for acute care health plans. The only item that is subject to negotiation during renewal periods is the capitation rate. The other major difference is that acute care contracts follow the federal fiscal year cycle rather than the SFY cycle.

For FY 93, APIPA renewed its contracts to provide acute care services to DES ALTCS eligibles in Cochise, Gila, Graham, Greenlee, Maricopa, Pima, and Santa Cruz counties. CAP renewed its contract to provide services to MR/DD beneficiaries in Coconino County. Mercy Care Plan (MCP) also continued its participation as a DES subcontractor, renewing its contracts in Maricopa, Pima, and Pinal counties.

DES released an RFP (#E-DDD-93021) on May 5, 1992 soliciting bids for acute care health plans in the remaining counties: Apache, La Paz, Mohave, Navajo, Yavapai, and Yuma. Responses to the RFP were due June 15, 1992. A pre-proposal conference was scheduled for May 18, 1992 in Phoenix. Proposals were to be evaluated according to the following factors, in descending order of importance: the provider network, contractor program operations, contractor financial operations, and the capitation proposal. DES did not receive any acceptable responses to its FY 93 RFP. Apache, La Paz, and Yuma counties retained their fee-for-service status. Mohave and Navajo counties,

which had been managed by Family Health Plan of Northeastern Arizona (FHPNA), and Yavapai County, which had been managed by Northern Arizona Family Health Plan (NAFHP), reverted to fee-for-service status.

Efforts are being made to improve the procurement process for acute care services. For example, in conjunction with the Attorney General's Office, DES developed a streamlined provider agreement for acute care health plans. With the exception of reimbursement rates, the provider agreement is now standardized for all plans. DES has also halted its practice of closely tying its procurement process to AHCCCSA's. In past years, DES purposely tried to mirror AHCCCS' acute care RFP and cycle. According to DES staff, some providers perceived this practice to be coercive.

DES retains the services of Mercer to develop actuarially-sound capitation rate ranges that are used in rate negotiations with acute care health plans. There are two rate codes, one for DD clients with Medicare coverage and one for those without Medicare coverage. Rates are adjusted to reflect differential cost and utilization patterns among Maricopa, Pima/Pinal, and rural counties. For contract renewals, Mercer makes adjustments that are necessary to address changes in the risk structure of the program (e.g., changes in the demographics of the covered population).

The capitation rates paid to acute care health plans by DES in Years 10 and 11 are presented in Table 3-10. During our site visit to DES in October 1992, DES indicated that negotiations of the Year 11 capitation rates had not yet been completed. From October 1, 1992 through January 31, 1993 acute care health plans were paid their Year 10 rates inflated by 7.56%. Year 11 rates went into effect on February 1, 1993. In all cases, the capitation rates that went into effect on February 1 were lower than the interim capitation rates used for the first quarter of Year 11. According to DES staff, the delay in negotiating rates was related to difficulties in reconciling DES' acute care utilization data to data provided by the health plans.

Table 3-10

DES CAPITATION RATES PAID TO ACUTE CARE PLANS IN FY 92 AND FY 93

	Counties	10/1/91 - 9/30/92 Medicare	10/1/91 - 9/30/92 Non-Medicare	10/1/92 - 1/31/93 Medicare	10/1/92 - 1/31/93 Non-Medicare	2/1/93 - 9/30/93 Medicare	2/1/93 - 9/30/93 Non-Medicare
APIPA	Cochise	$ 92.83	$237.91	$ 99.85	$255.90	$ 95.61	$245.05
	Gila	92.83	237.91	99.85	255.90	95.61	245.05
	Graham	92.83	237.91	99.85	255.90	95.61	245.05
	Greenlee	92.83	237.91	99.85	255.90	95.61	245.05
	Maricopa	108.90	284.30	117.13	305.79	112.17	292.83
	Pima	100.50	270.58	108.10	291.04	103.52	278.70
	Santa Cruz	92.83	237.91	99.85	255.90	95.61	245.05
CAP	Coconino	95.00	250.87	102.18	269.84	97.85	258.40
MCP	Maricopa	109.71	281.34	118.00	302.61	113.00	289.79
	Pima	101.52	263.93	109.19	283.88	104.57	271.85
	Pinal	105.76	268.96	113.76	289.29	108.93	277.03
FHPNA	Mohave	110.10	278.10	N/A	N/A	N/A	N/A
	Navajo	110.10	278.10	N/A	N/A	N/A	N/A
NAFHP	Yavapai	110.10	278.10	N/A	N/A	N/A	N/A

Source: History of Contracted Health Plans - DES, February 1993.

N/A Not A Provider

For clients with Medicare coverage, the rates ranged from a low in Cochise, Gila, Graham, Greenlee, and Santa Cruz counties of $92.83 and $95.61 in Years 10 and 11, respectively, to a Year 10 high of $110.10 for Mohave, Navajo, and Yavapai counties and a Year 11 high of $113.00 paid to MCP for Maricopa County. Rates were higher for DD beneficiaries without Medicare, ranging from $237.91 to $284.30 in Year 10 and from 245.05 to 292.83 in Year 11.

Provider Reimbursement

Acute care plans are reimbursed via fixed-rate, risk-based capitation. Plans receive their capitation payments from DES by the tenth day of each month for all members enrolled as of the first day of the month. Retroactive adjustments to the capitation payment are made in the following month for membership changes that occur during the previous month, i.e., members who enroll or disenroll after the first of the month.

Development of Provider Networks

In addition to providing LTC services, DES is required to have an acute care delivery system. To become a DES contracted health plan, an offeror must demonstrate the presence of a comprehensive network capable of delivering all covered acute care services. As of January 31, 1993, 82% of DES ALTCS eligibles were enrolled with a DES contracted health plan. Foster care children throughout the state receive services through the Comprehensive Medical and Dental Plan (five percent of DES ALTCS eligibles). Native Americans who reside on reservations can opt to receive services through the Indian Health Service (four percent of DES ALTCS eligibles). The remainder of DES ALTCS eligibles (nine percent) receive services through DES' fee-for-service network.

APIPA was DES' largest acute care plan in Year 11 serving beneficiaries in Cochise, Gila, Graham, Greenlee, Maricopa, Pima, and Santa Cruz counties

(see Table 3-11). As of January 31, 1993, 75% of DES ALTCS eligibles in contracted health plans were enrolled with APIPA. MCP was the second largest health plan (22% of eligibles), providing services in Maricopa, Pima, and Pinal counties. CAP contracted to provide acute care services in Coconino County in Year 11 (3% of eligibles). All of these health plans also served these counties in Year 10. In Year 10, DES beneficiaries in Mohave and Navajo counties were served by FHPNA, and in Yavapai County by NAFHP; however, FHPNA and NAFHP terminated their participation in Year 11. Thus, the fee-for-service network grew from three counties (Apache, La Paz, and Yuma) in Year 10 to six counties (Apache, La Paz, Mohave, Navajo, Yavapai, Yuma) in Year 11.

In contrast to the rural counties where each had at most only one health plan providing services to ALTCS beneficiaries, MR/DD beneficiaries in Maricopa and Pima counties had a choice between two health plans for Years 10 and 11. After their initial health plan selection, clients are only allowed to switch health plans during the yearly open enrollment period. The most recent open enrollment was held from August 17-28, 1992. DES estimates that approximately 80% of its ALTCS beneficiaries were eligible to switch health plans, of which about four percent exercised this option. DES engages in several activities to entice more health plans to participate in the program. For example, DES offers to assist contractors in recruitment and retention of PCPs interested in treating people with developmental disabilities. DES will meet with PCPs known to treat people with developmental disabilities to discuss participating in a health plan's provider network. DES also distributes newsletters and conducts seminars on working with persons with developmental disabilities.

Despite such efforts, the number of counties in which DES ALTCS beneficiaries receive services from capitated plans has decreased over time. During the first year of ALTCS, only Apache and La Paz counties did not have participating subcontractors. APIPA subsequently pulled out of several counties due to an inability to negotiate acceptable rates with DES. Through the years, several other plans have had relatively brief tenures as DES acute care health plans, including Maricopa Health Plan (Maricopa County), FHPNA

Table 3-11

DES ACUTE CARE HEALTH PLANS FOR AHCCCS YEARS 7-11 BY COUNTY

	Year 7	Year a	Year 9	Year 10	Year 11
Apache	FFS	FFS	FFS	FFS	FFS
Cochise	APIPA	APIPA	APIPA	APIPA	APIPA
Coconino	APIPA CAP	CAP	CAP	CAP	CAP
Gila	APIPA	APIPA	APIPA	APIPA	APIPA
Graham	APIPA	APIPA	APIPA	APIPA	APIPA
Greenlee	APIPA	APIPA	APIPA	APIPA	APIPA
La Paz	FFS	FFS	FFS	FFS	FFS
Maricopa	APIPA MCHP	APIPA MCHP	APIPA	APIPA MCP	APIPA MCP
Mohave	APIPA	FFS	FHPNA	FHPNA	FFS
Navajo	APIPA	APIPA	APIPA FHPNA	FHPNA	FFS
Pima	APIPA	APIPA	APIPA	APIPA MCP	APIPA MCP
Pinal	APIPA	APIPA	APIPA	MCP	MCP

Table 3-11 (Concluded)

DES ACUTE CARE HEALTH PLANS FOR AHCCCS YEARS 7-11 BY COUNTY

	Year	Year 8	Year	Year 10	Year 11
Santa Cruz	APIPA	APIPA	APIPA	APIPA	APIPA
Yavapai	APIPA	APIPA	APIPA NAFHP	NAFHP	FFS
Yuma	APIPA	APIPA	APIPA	FFS	FFS

Source: History of Contracted Health Plans - DES, February 1993.

(Mohave and Navajo counties), and NAFHP (Yavapai County). There was some dialogue between DES and AHC, the new acute care plan affiliated with VHS, about becoming a DES health plan in Year 11, but no contract was signed.

In our discussions with some of the AHCCCS acute care plans, they suggested several reasons for their reluctance to participate. The problem of finding physicians who are willing to deal with the unique needs of the DD populations (e.g., the additional office time required) is one issue they raised. Perhaps even more important is the lack of control over the coordination between the DES case manager and the PCP. Many expressed frustration with the inability to manage acute care and LTC in one contract. There seems to be some concern that DES case managers may see their role as more of a patient advocate than a gatekeeper, and thereby may pressure physicians to provide "unnecessary" services. Another problem cited was the additional pressure on physicians exerted by advocacy groups for the developmentally disabled.

To recruit providers into their provider networks in the three new fee-for-service counties, DES met with AHCCCS-registered acute care providers during August and September 1992. According to DES, most of the physicians in the fee-for-service networks in Navajo, Mohave, and Yavapai are the same as those who were providers with FHPNA or NAFHP, although we do not have documentation to verify this information.

Grievances and Appeals

Grievances and appeals are handled by the Office of Compliance and Review at DES. Organizationally, the Office of Compliance and Review reports directly to the Assistant Director of the DDD who signs all of the formal grievance responses. The Office's staff consists of the Compliance and Review Manager who heads the Office, three Coordinators, and one Administrative Assistant. Attorneys from the Office of the Attorney General are used when they are needed to handle appeals.

The Office of Compliance and Review has a great deal of interaction with a number of advocacy groups for the MR/DD population. One of the more influential groups is a public interest law firm, the Arizona Center for Law in the Public Interest. Another group is the Arizona Retarded Citizens Association, which has a guardianship program and often gets involved as an advocate for their guardians. Other advocates mentioned by DES were the Governor's Council and Pelot Parents, as well as one individual parent who advocates for other parents. According to DES, peaks in grievance activity over time correspond to outside activity (i.e., rallies, legislative hearings, etc.).

In the Year 10 renewal document issued to DES, AHCCCSA stipulated new minimum grievance and appeals'requirements that closely mirrored those presented to the EPD contractors. Member grievances must be filed within 35 days after the date of the adverse action and provider grievances must be filed within 12 months of the date of service. Like the EPD contractors, DES is required to submit quarterly grievance reports to AHCCCSA within 45 days from the end of the quarter. However, the CSDP did not mention a sanction for failure to submit these documents. DES was also required to submit a Grievance and Appeals Requirements Certification Form with its Year 10 renewal.

DES is required to have a procedure for member and provider grievances that includes a written decision within 30 days. For member grievances, the decision must state that the member may appeal to AHCCCSA for a formal evidentiary hearing. In the case of provider grievances, the provider may request a formal evidentiary hearing conducted by DES before appealing to AHCCCSA. Such a hearing must be requested within 15 days of the written grievance decision. DES has an informal as well as a formal grievance process. Although DES has typically had more formal grievances relative to informal ones, the number of informal grievances is reported to be growing.

In FY 92, DES reported 637 formal grievances, or 107 per 1,000 members, as shown in Table 3-12. This rate is significantly larger than that reported for EPD contractors earlier in the chapter (five grievances per 1,000 EPD

Table 3-12

FORMAL GRIEVANCE ACTIVITY FOR DES
FOR FY 92 BY TYPE OF GRIEVANCE

	Number
Total Grievances	637
Member Grievances	171
Health Plan Grievances	34
Denied	11
Affirmed	11
Resolved	7
Pending	5
Withdrawn	0
LTC Grievances	137
Denied	68
Affirmed	29
Resolved	19
Pending	5
Withdrawn	16
Provider Grievances	466
Denied	184
Affirmed	256
Resolved	12
Pending	12
Withdrawn	2
Enrollment as of September 1, 1992	5,969

Source: FFY 92 Grievances - DES, October 1992.

eligibles) for FY 92. This difference may be attributable to a number of factors. First, the grievance numbers were obtained from different reports, and it is likely that the reports compile slightly different information. Grievance figures for the EPD contractors were obtained from a summary worksheet prepared by AHCCCSA. DES numbers were obtained directly from DES' Office of Compliance and Review. DES may also report grievances more completely than the EPD contractors, Another factor may be the additional scrutiny and pressure put on DES by advocacy groups for the MR/DD population. Finally, the rate differences may reflect real differences in member and provider satisfaction.

Total grievances can be broken down into 171 member grievances (29 per 1,000 members) and 466 provider grievances (78 per 1,000 members). Comparing this breakdown to that reported for the EPD contractors in Table 3-6 shows that DES has a higher proportion of member grievances than the EPD contractors. Of the 171 member grievances, 34 were health plan grievances and 137 were LTC grievances related to HCB services. About half of the LTC member grievances (68) were denied. Of the 29 LTC grievances that were appealed to AHCCCSA, eight were sustained, eight were withdrawn, 12 were still pending, and none were overturned. An equal number of decisions were affirmed as were denied (11) for the 34 health plan grievances filed. Two of the four health plan appeals were sustained and two were pending as of October 1992.

The majority of provider grievances were affirmed (256) compared with 184 which were denied. Very few of these decisions were appealed to AHCCCSA. Of those that were appealed, four were sustained, two were overturned, 32 were withdrawn, and eight were still pending as of October 1992. According to DES, most of the provider grievances concerned payment issues.

Internal Information Systems

DES uses the Arizona Social Services Information and Statistical Tracking System (ASSISTS) to process most of its internal data related to its LTC clients (both ALTCS and non-ALTCS). ASSISTS was designed to allow for on-

line entry of client, provider, worker, contract, services, service plan, service authorization, service delivery, and expenditure data. Service plan data is used by DES for payment authorization. The ASSISTS system will not allow payment for claims that are not authorized. ASSISTS also interfaces with the DES accounting system. Unlike other state agencies, DES maintains its own mainframe computer and does not use the Department of Administration's computer facilities.

ASSISTS is generally acknowledged to have shortcomings. Many of these relate to the fact that ASSISTS was originally designed for use in the state of Utah and was quickly adapted for use in Arizona in July 1988. Numerous DES staff expressed a strong preference to develop their own software system, one that would be better tailored to ALTCS. However, a lack of funds prevents DES from doing so and there is no official implementation schedule for a new system at present.

According to DES, a regular set of monthly and quarterly reports are generated from the data in its management information system and sent to the districts. Although we haven't received them, DES staff expressed their opinion that such reports could be improved. One limitation described by DES staff is that the reports do not distinguish between ALTCS and non-ALTCS clients. Our own experiences with requesting information from DES' management information system have been mixed. In some cases, DES was able to promptly prepare a requested report (e.g., case manager caseload by county). However, in other instances DES was unable to provide data that we would expect a management information system to produce routinely (e.g., historical data on the number of ALTCS clients by county for Years 7, 8, and 9).

Acute medical services are processed through INC, a third-party processor. Acute care plans are required to send data on utilization and cost of services directly to INC. DES indicated that there may be a problem getting data from its providers to INC, and that the data is especially problematic for the early years of the program. As of August 1992, DES staff indicated that, given resource constraints, their main focus was present operations rather than correcting historical data. It is possible that acute

care encounter data in the AHCCCS data files will never be accurate for past years.

As discussed earlier in this chapter, inconsistencies between INC's utilization data and data from the health plans impeded Year 11 rate negotiations for several months.[8] As part of the process of calculating Year 11 capitation rates for DES' contracting health plans, Mercer examined the encounter data compiled by INC and compared it to data provided by the health plans. Mercer determined that INC's data needed a large number of corrections before the data could be used to set rates and in the rate setting process. Mercer also determined that the corrections could not be completed quickly enough to facilitate the rate setting process for Year 11. Instead, the Year 11 rates were based on analyses of utilization and financial data provided directly from the health plans. According to Mercer, "due to the lack of accurate encounter data, Mercer could not complete a thorough actuarial analysis to determine the rates to be paid."[9]

Relationship with AHCCCSA

Because they are both state agencies of equal status (reporting to the same Special Assistant to the Governor), the relationship between AHCCCSA and DES differs from that between AHCCCSA and the other program contractors. Specifically, there are differences in the areas of monitoring, reporting, auditing, and enforcement. This section discusses two important areas that relate to this issue: potential constraints to AHCCCSA's authority, and utilization and case management reporting.

Initially, DES and AHCCCSA's relationship is acknowledged not to have worked very well; however, there appears to be a general sense that communication between the two state agencies started to improve in the third year of ALTCS. Both sides largely attribute the improvement to efforts made by individuals within each organization. The two agencies now meet more frequently than they did in the past and on a more regular basis. Their

respective technical staffs are working together to solve computer system problems.

AHCCCSA Authority

According to HCFA, AHCCCS is the single Medicaid state agency for the program. In theory and practice, DES issues go to AHCCCSA who then negotiates with HCFA on DES' behalf. DES and HCFA have never negotiated directly. There was, however, at least one meeting with HCFA where DES was present at AHCCCSA's request. This meeting concerned DES' data system.

Unlike the EPD contractors, DES negotiations are handled by the Director's Office at AHCCCS rather than by the Division of Business, Finance, and Research. This difference is attributed to the nature of the relationship between the agencies. Except for this important difference, the negotiation process is quite similar to that of the EPD contractors.

In general, there appears to be more "give and take" with respect to audit issues and reporting in DES' relationship with AHCCCSA, as compared to the relationship between AHCCCSA and other EPD contractors. According to some AHCCCSA staff, there is a sense that AHCCCSA has "less of a hammer" in its dealings with DES. AHCCCSA may thus exhibit less oversight responsibility for DES performance of HCFA requirements.

Utilization and Case Management Reporting

Since the beginning of the ALTCS program, DES has had a strong preference to maintain its own data system separate from PMMIS. Some of the main reasons for DES' position included not wanting to depend on another state agency for data and wanting to track all of its clients, not just ALTCS clients, on one data system. DES still favors a separate system approach and is beginning to discuss a redesign of its current system.

DES has experienced a plethora of problems in submitting data to AHCCCSA. One such problem revolves around the definition of units of service both in CATS and in the AHCCCS encounter data. Prior to SFY 93 DES recognized more than one unit definition for a given service. For example, days, hours, months, and personal need were all acceptable units of service for day treatment and training in SFY 92 (see Table 3-13). These data have been passed along to AHCCCSA without consideration of the unit of service option selected and how it might translate to AHCCCS' standard unit of service definitions. Thus, numbers of services used for prior DES data are incorrect in the PMMIS to the extent that they represent service units not in AHCCCS' defined standard unit.

Efforts have been made by DES to standardize the units, so data after SFY 92 should have fewer problems. Despite these improvements, according to the information we received from DES shown in Table 3-13, there are still some discrepancies in the unit of service definitions. According to the DES service specifications for SFY 93, days is the appropriate unit of service for residential habilitation services, whereas AHCCCSA's standard is hours. Additionally, several of the services listed have a unit defined as a period of time. This leaves some question as to how DES would code a visit (or treatment) that had a length that was longer or shorter than the period of time defined.

Prior to August 1992, there were significant discrepancies between the service and placement data in DES' internal system and the data in AHCCCS' CATS system. Many of the discrepancies were due to the rejection of a large number of DES' submitted data because they failed PMMIS edits (e.g., invalid provider identification number). According to AHCCCSA spokespersons, there was also a problem whereby the wrong records in CATS would sometimes be' updated. As a result, it was possible that the CATS data might not reflect a placement for a person who was actually receiving HCB services. Beginning in February 1992, DES and AHCCCSA worked together to perform a file reconciliation of the CATS data. Six or seven reconciliations were performed

Table 3-13

COMPARISON OF DES AND AHCCCS UNIT OF SERVICE DEFINITIONS

SFV 93 Service Name	SFV 92 Service Name	SFV 93* Units	SFV 92**	AHCCCS
Day Treatment & Training	Adult Day Care	Hour	H	Hour
Day Treatment & Training	Rehabilitation Instruction	Hour	D,H,N	Hour
Day Treatment & Training	Day Treatment & Training	Hour	D,H,M,N	Hour
Habilitation (Home)	Alternative Communication Training	Hour	H	Hour
Habilitation (Home)	Home Management Training	Hour	D,H	Hour
Habilitation (Home)	Personal Living Skills	Hour	H	Hour
Habilitation (Residential)	Habilitation	Day	D,H	Hour
Home Health Nurse	Home Health Nurse	Visit=1 Hour	D,H,V	Visit
Home Health Aide	Home Health Aide	Visit=1 Hour	H,V	Visit
Housekeeping Chore/Homemaker	Homemaker	Hour	H,M,N,V	Hour
Occupational Therapy Treatment	Occupational Therapy	Treatment=1 Hour	C,H	
Personal Care	Personal Care	Hour	H	Hour
Physical Therapy Treatment	Physical Therapy	Treatment=1 Hour	C,H	
Respite	Respite Short-Term	Hour	H	Hour
Speech Therapy	Speech Therapy	Treatment=1 Hour	C,H,T	Trip
Transportation	Other Vehicle	Trip	K,M,N,T	Trip
Transportation	Private Vehicle	Trip	K,M,N,T	Trip
Transportation	Wheelchair Van	Trip	K,M,N,T	Trip

Sources: ASSIST/CATS Service Kind Comparison - DES, August 1992; Services Revision Effective July 1, 1992 - DES, October 1992; and DES LTC RFP, SFV 93 - DES January 1992.

* As defined in SFV 93 service specifications

** Codes are defined as: C=Treatment, D=Day, E=Exam, F=Quarter Day, H=Hour, K=Mile, L=Half Day with Lunch, M=Month, N=Personal Need, P=Placement, Q=Quarter Hour, S=Session, T=Trip or Ticket, U=Half Day without Lunch, V=Visit, W=Week, Z-Meal.

between February and August 1992 and, according to sources at DES and AHCCCSA, the discrepancies between the data have been greatly diminished.

Data validation results for Year 8 highlight the difficulties that DES has experienced in encounter data submission. DES' Year 8 omission rate of 28.2% on the ALTCS Home Health, Therapies, and Personal Care Data Validation and 41.3% on the Year 8 Nursing Home Data Validation were among the largest recorded for all the contractors, and significantly above the acceptable standard of five percent. Because of the large number of Year 8 encounter omissions, DES and AHCCCSA worked together to perform a full file reconciliation of Year 8 encounters. To correct the problem, AHCCCSA provided DES with a list of all the omissions identified in the data validation studies and DES tracked down the cause of each omission. Through a series of corrective actions over the period April 1992 to September 1992, DES was able to significantly reduce the omission rates. Encounter data submission seems to have improved for Year 9.

At the time the final Year 8 Home Health, Therapies, and Personal Care Data Validation was issued, AHCCCSA did not plan to sanction DES because they "determined that upholding a sanction would be difficult or impossible under Arizona law. Therefore, AHCCCSA will not be able to impose a sanction on DES-DD."[10] This determination was disputed and overruled by HCFA, which concluded that DES' unacceptable performance could be subject to sanction. According to special terms and conditions #19 for FY 93, AHCCCSA must calculate the correct amount to sanction DES for its Year 8 encounter data submission errors and this amount will be withheld from HCFA's payments to AHCCCSA for DES services.[11]

Policy Implications

ALTCS is an experimental program in which public and private sector entities contract with the state to provide services to eligible long-term care beneficiaries throughout Arizona. Under the program rules, county government entities have the right of first refusal to become the sole program

contractor for the EPD population in their respective counties. Maricopa and Pima counties are required by law to serve in this capacity. DES is mandated to be the sole program contractor for the state's MR/DD beneficiaries. One innovative program feature is the use of competitive bidding among private contractors to serve EPD beneficiaries in those counties that do not elect to become contractors. In counties where a qualified contractor cannot be located, AHCCCSA provides services through its fee-for-service network.

As ALTCS entered its fifth year of implementation, a comprehensive network of public and private sector entities had been set up across the state, with only two of Arizona's 15 counties being served by AHCCCSA's fee-for-service network. Nevertheless, there has not been much competition to date among private contractors to serve the 12 rural counties for which the county is not the program contractor. One change mentioned by several private contractors that might help to stimulate interest among potential participants would be to open up the urban counties, Maricopa and Pima, to more than one contractor. Such a change, however, could not be achieved without legislative action.

Other states considering similar programs should understand that in designing ALTCS, the state did not want to have a large role in direct service provision. Although sometimes forced to assume this role, AHCCCSA seems to view such situations as stop-gap mechanisms. As a result, we observe that when public or private contractors take over the responsibility for service delivery from AHCCCSA, there is more internal infrastructure development, provider network development, and implementation of more efficient ways to pay providers. States that want to play a stronger role in setting up provider networks and delivering services would likely make different decisions in how they set up their staffing and internal infrastructures.

There have been consistent improvements in the availability of ALTCS HCB services as the program has matured. Rural areas still pose some difficulties as evidenced for the EPD contractors and DES, who both reported more limited service availability in rural counties than in urban ones. Given low population densities and transportation constraints, it may not be appropriate

or cost effective to require that a full range of services be offered in each county. AHCCCSA and the program contractors have looked at creative ways to address this situation. One example is AHCCCSA's request to HCFA to allow contractors to substitute group respite services for adult day health services when a rural area cannot support an adult day health center.

One issue that continues to be raised by the EPD contractors is the payment methodology for HCB services. As of the fifth year of the program, contractors that exceed the contracted HCBS enrollment level by more than 0.5 percentage points are required to return funds to AHCCCSA, but no reconciliation takes place if they place fewer clients in an HCBS setting. Some contractors have suggested a preference for a risk-sharing range, which they feel would be more consistent with the philosophy of capitation.

Program contractors have to a large extent adopted competitive, managed care approaches to pay their providers. Although some providers in their networks receive fee-for-service reimbursement, there has been significant movement away from this model. Most of the contractors have capitation arrangements with the majority of their PCPs, for example. It is also of interest to note that most of the ALTCS contractors rely on acute care provider networks that they have set up for AHCCCS, and that the mechanisms used to pay physicians under ALTCS often mirrors the way they are paid under the acute care program.

The development of a good data system is especially critical for decision making in a managed care environment. The ALTCS contractors' experiences with implementing internal data systems capable of providing timely and accurate information show significant variation. Some of the contractors have developed rather sophisticated systems, while others have faltered. There is a general sense of an improved level of cooperation between the contractors and AHCCCSA regarding data issues, but the contractors still feel that they are giving a large amount of data to AHCCCSA and getting little back in return. It is possible that if there were more positive incentives for submitting good data, the quality of the data would improve. An example of a positive incentive would be if AHCCCSA produced comparative

utilization statistics to be shared with the contractors. AHCCCSA has indicated that they plan to do this for the Year 12 contracting process. Other benefits could be realized if AHCCCSA were to provide more broad-based technical assistance to the contractors — for example, if AHCCCSA were to help new contractors with the design of their systems.

DES' experiences during the first five years of the ALTCS program point out the importance of investing in an infrastructure suitable to the managed care model of service delivery. As an ALTCS contractor, it is important in committing resources to strike a balance between service delivery and administrative structure to assure that services are delivered appropriately and cost effectively. Historically, DES has focused on the service delivery components of its charge rather than on infrastructure investments such as documentation and data systems. As a result, DES has an information system that is acknowledged not to be particularly well tailored to its needs in a capitated system and that can be incapable of producing information that one would expect it to be able to produce routinely. This can put DES at a disadvantage in rate negotiations both with HCFA (via AHCCCSA) and providers. A better data system could have alleviated the unnecessary expenditures associated with the interim capitation payments paid to acute care providers for the first quarter of Year 11 while data problems were resolved. It is our observation that DES needs to consider focusing more resources on developing an appropriate infrastructure for a capitated delivery system.

Within DES, there seems to be a very defined division of responsibilities organizationally that may take away from the integrated philosophy for the provision of services to ALTCS beneficiaries. Separating the long-term care and acute care functions so completely may also contribute to DES' difficulties recruiting health plans into its acute care delivery system. Some potential health plans have articulated concerns about a perceived conflict between the gatekeeper philosophy of their PCPs and the advocacy case management approach of DES' case managers.

A final lesson for others considering a similar model of financing and delivering long-term care services relates to the importance of considering

the relationships between governmental agencies. In operating programs that involve more than one governmental agency, especially agencies that are of equal status, it is necessary to be concerned about the channels of communication and responsibility. A positive development in regard to this issue is that communication between AHCCCSA and DES, which had been problematic in the early years of ALTCS implementation, appears to have improved.

4. METHOD OF SETTING THE CAPITATION PAYMENTS

Introduction

This chapter focuses on the methods used to set capitation payments for the long-term care program contractors participating in the Arizona Long-Term Care System (ALTCS). It also examines the financial experience of these contractors.

Capitated financing has some distinct advantages over other reimbursement methods. With prepaid capitation, reimbursement rates are fixed and known in advance. This leads to more accurate revenue forecasting for program contractors. Capitation financing shares the risk between the entity which gives the capitation and the one that receives it. While the capitating entity has risk for the number of people who are eligible for the program, the capitated entity has the risk for providing a set of defined services for each eligible person within the capitation rate.

Because those eligible for ALTCS have been prescreened and determined to be at risk of institutionalization, a system using a capitation payment for each eligible should provide incentives for program contractors to create an efficient delivery system. ALTCS program contractors may be able to do this through their use of case management, by substituting home and community-based (HCB) services for institutional care, and through the use of selective contracting and/or competitive bidding to reduce unit costs.

In the first two Implementation and Operation Reports, this chapter examined how the Health Care Financing Administration (HCFA) set capitation payments to the State of Arizona. However, this is no longer done. For fiscal years (FY) 1989 and 1990, HCFA paid Arizona a monthly capitation payment for acute (AHCCCS program) and long-term care beneficiaries (ALTCS

program). Beginning in FY 91, HCFA reimbursed Arizona for acute and long-term care services for AHCCCS beneficiaries and acute care services for ALTCS beneficiaries using the cost-matching methodology generally used for traditional Medicaid programs. According to this methodology, reimbursement is based on actual costs multiplied by the federal medical assistance percentage (FMAP). ALTCS beneficiaries' long-term care services continued to be reimbursed on a capitated basis for FY 91. In FY 92, long-term care service reimbursement for ALTCS beneficiaries was also changed to this traditional method. HCFA has always reimbursed ALTCS administrative costs based on a percentage of actual costs.

This chapter first describes and analyzes the major evaluation issues. It then presents the policy implications of the findings.

Major Evaluation Issues and Findings

This chapter contains analyses of capitation methods and financial data for the Department of Economic Security (DES), the statewide mentally retarded/developmentally disabled (MR/DD) contractor, and for the elderly and physically disabled (EPD) contractors. The data reported in the tables that follow are sometimes presented for state fiscal year (SFY) and sometimes for federal fiscal year (FFY).

Deoartment of Economic Security

DES analyses focus on the DES rate-setting methodology employed and attempts to present some information concerning how well DES is managing within their budgeted amounts.

Rate Setting for DES

Prior to implementation of the ALTCS program in December 1988, negotiations were held between HCFA, the AHCCCS Administration and DES to determine HCFA payment rates. Federal reimbursement for MR/DD eligibles is passed directly from HCFA through AHCCCS to DES. For FY 89, it was agreed that HCFA would pay an interim per diem rate for long-term care services which differed by the level of care received by the MR/DD client. These levels of care were: 1) SNF, 2) ICF, 3) ICF/MR, and 4) HCB. Almost all MR/DD eligibles were in the fourth level of care.

For acute care services, DES was paid a fixed amount per MR/DD eligible by AHCCCS. For the first 12 months of the ALTCS program, from December 19, 1988 to December 31, 1989, DES received $4.87 per day of MR/DD eligibility. This corresponded to a monthly rate of $148.13 per MR/DD client. From January 1, 1990 through September 30, 1991, DES was paid $135.32 per member per month for acute care services provided to MR/DD eligibles. For the fourth program year, FY 92 (October 1, 1991 through September 30, 1992), DES received $152.14 per member per month for MR/DD acute care costs.

As part of the 1988 agreement between HCFA and Arizona, it was also agreed that DES would conduct an audit of the FY 89 data, and there would be a reconciliation of the interim HCFA reimbursement rates to the actual costs incurred by DES for ALTCS MR/DD eligibles. The audit was delayed, and the FY 89 interim HCFA rates were also used for reimbursement in FY 90, FY 91, and FY 92. The only change which affected federal reimbursement was the change in the FMAP for Arizona each fiscal year. Table 4-1 gives the interim per diem rates that were established, and the HCFA share of the rates for FY 89, FY 90, FY 91, and FY 92.

Table 4-2 shows the derivation of the HCFA FY 89 MR/DD long-term care payment rates. The average rate by level of care was calculated by weighting each facility's rate by the facility's average daily census. This is the "base rate" in Table 4-2. This rate was adjusted for the cost of therapies,

Table 4-1

HCFA LONG-TERM CARE* INTERIM PAYMENT RATES FOR MR/DD ELIGIBLES
BY LEVEL OF CARE FOR FY 89, FY 90, FY 91, AND FY 92

	Per Diem Rate	HCFA Share of Per Diem Rate			
		FY 89	FY 90	FY 91	FY 92
SNF	$130.89	$ 81.20	$ 79.83	$ 80.79	$ 81.95
ICF/MR	213.03	132.16	129.93	131.48	133.38
ICF (non-ICF/MR)	47.86	29.69	29.19	29.54	29.97
HCB Services	54.46	33.79	33.22	33.61	34.10

Source: Letter to Leonard Kirschner, AHCCCS Administration, from Sidney Trieger, HCFA, dated March 23, 1989.

* Excludes reimbursement for acute care services.

Table 4-2

DERIVATION OF HCFA MR/DD LONG-TERM CARE* PER DIEM PAYMENT RATES BY LEVEL OF CARE FOR FY 89

	SNF	ICF/MR	ICF (non-MR)	HCB
Base Rate	$122.14	$209.17	$51.09	$49.23**
Therapies (4%)	4.89	included	2.04	0.00
Case Management	3.86	3.86	3.86	5.23
Patient Share of Cost	0.00	0.00	(12.30)	0.00
Administration (7.1%)	included	included	3.17	included
Per Diem Rate on Which HCFA Payment is 'Based	130.89	213.03	47.86	54.46
HCFA Payment	81.20	132.16	29.69	33.79

Source: Letter to Leonard Kirschner, AHCCCS Administration, from Sidney Trieger, HCFA, dated March 23, 1989.

* Excludes reimbursement for acute care services.

** The composite HCBS capitation rate of $54.46 is a weighted average of the per diem rates for the following types of facilities, plus a case management fee. The facilities are group homes ($66.19), adult day health ($27.04), and HCB services ($21.32). The case management fee added to the weighted average is $5.23.

case management services, patient share of cost, and administrative expenses. The agreement between HCFA and Arizona called for reconciliation to actual costs on several elements of the estimate. Reconciliation was to be done on the average facility per diem rate, cost of therapies, patient share of cost, and administrative expenses for ICF care. Reconciliation for case management and HCB costs was to be done only if actual cost was below the budgeted amount.

The HCFA share of the per diem rates shown in Table 4-2 equals the per diem rates multiplied by the FMAP. The FMAP for Arizona was 62.04 percent for FY 89, 60.99 percent for FY 90, 61.72 percent for FY 91, and 62.61 percent for FY 92. The HCBS rate was used for all MR/DD eligibles who were not institutionalized in a SNF, ICF, or ICF/MR facility. The HCBS rate shown in the table, $54.46, includes adjustments for therapies, case management, patient share of cost, and administration.

The 1988 agreement between HCFA and Arizona stipulated that AHCCCS would furnish audited expenditure data to HCFA within six months after the end of the first program year. HCFA would recover surplus reimbursements within six months following the date of availability of that data. Any surplus or deficit federal reimbursements for the second year of ALTCS (FY 90), as a result of basing the second year HCBS rate on $54.46 rather than the audited rate, would also be recovered or paid by HCFA within six months following the date of availability of appropriate data.

During rate negotiations in 1988, there were discussions between HCFA and Arizona concerning whether the interim rate should be adjusted both up and down based on the audited data, or whether the rate should be considered a cap. It was agreed that the final rate would be reconciled, up or down as appropriate, based on the audit findings. HCFA stipulated that the HCFA Regional Office either conduct an independent audit of ICF/MR and group homes, or work with the Arizona auditors to ensure that the audit met HCFA requirements. As a result of the negotiations conducted in 1992 it was agreed that the rates for FY 89 and FY 90 were to be reconciled based on actual costs for those years as established by audits acceptable to HCFA.

Financial Reconciliation for SFY 89 and SFY 90

The audits for DES expenditures on ALTCS MR/DD eligibles in state fiscal year (SFY) 89 and SFY 90 were completed in the summer of 1992. The negotiations between HCFA and Arizona regarding the financial reconciliation required for MR/DD eligibles for FY 89 and FY 90 were completed in October 1992.

Table 4-3 provides a summary of the results of the reconciliation. For SFY 89 the cost of long-term care services for MR/DD eligibles was $14.8 million. Case management and other administrative costs totalled $6.7 million. Total MR/DD costs experienced by DES for MR/DD eligibles in SFY 89 were $21.5 million. Of this amount (actual audited costs), the federal share was $13.4 million based on the FMAP for Arizona of 62.04 percent.

Arizona had been paid $15.7 million for SFY 89 using the interim federal reimbursement rates discussed above. As shown at the bottom of Table 4-3, the financial reconciliation resulted in Arizona owing HCFA $2,357,185 due to overpayments based on the interim rates.

For SFY 90 the cost of long-term care services used by MR/DD eligibles was $45.4 million, and administrative costs were an additional $15.3 million, for a total of $60.7 million. The federal share of audited DES expenditures, based on an FMAP of 61.25 percent, was $37.2 million.

On the interim rate basis, HCFA had paid Arizona $36.8 million for MR/DD eligibles in SFY 90. Thus, HCFA owed Arizona $395,822 as a final settlement for SFY 90.

As of January 1993, the audits had not been completed for fiscal years 1991 or 1992. Arizona continued to be paid by HCFA for DES beneficiaries on the interim rate basis for those years. After the audits are completed, HCFA and Arizona will negotiate the financial reconciliation for fiscal years 1991 and 1992.

Table 4-3

FINANCIAL RECONCILIATION BETWEEN HCFA AND ARIZONA
FOR LONG-TERM CARE SERVICES FOR MR/DD
ELIGIBLES FOR SFY 89 AND SFY 90

	SFY 89	SFY 90	Total
Audited DES Expenditures	$21,548,815	$60,657,725	$82,206,540
Medical Services	14,825,759	45,389,460	60,215,219
SNF	68,354	1,045,743	1,114,097
ICF	80,847	233,715	314,562
ICF/MR	3,196,485	5,908,731	9,105,216
HCBS	11,480,073	38,201,271	49,681,344
Administrative	6,723,056	15,268,265	21,991,321
Case Management	2,129,672	3,388,939	5,518,611
Other	4,593,384	11,879,326	16,472,710
FMAP (SFY)	62.04%	61.25%	
Actual Federal Share	13,368,885	37,154,372	50,523,257
Federal Interim Rate Payments	15,726,070	36,758,550	52,484,620
Amount Due from (to) Arizona	2,357,185	(395,822)	1,961,363

Source: Letter to Sidney Trieger, HCFA, from Mabel Chen, M.D., AHCCCS Administration, dated August 17, 1992.

Derivation of Rates for FY 93

As part of the negotiations for the financial settlements for FY 89 and FY 90, Arizona proposed MR/DD prospective capitation rates which would not be reconciled to actual costs in FY 93. AHCCCS passes through to DES the entire federal share of the HCFA MR/DD capitation rate.

Table 4-4 shows the derivation of the MR/DD capitation rate for FY 93. The average institutional per diem is the weighted average of daily rates for SNF ($77.09), ICF ($44.40) and ICF/MR ($244.30) institutional care. The assumptions used for the weights are 23 percent SNF, two percent ICF, and 75 percent ICF/MR. The SNF and ICF rates were based on the audited DES costs for SFY 90, inflated by the DRI/McGraw Hill nursing home market basket inflation factor (i.e., SFY 90 rates were increased 14.87 percent). The ICF/MR rate was the weighted average of the average cost of state operated ICF/MR facilities for SFY 92 inflated to FY 93 (i.e., SFY 92 rates were increased 4.5 percent), and the Hacienda contracted rate for FY 93. Hacienda de los Angeles is an ICF/MR facility which serves medically involved children. The weights used were 85 percent for the state operated facilities and 15 percent for Hacienda.

Offsets to the average institutional per diem rate were assumed for Medicare/third-party liability (TPL) and patient share of cost. The Medicare/TPL adjustment assumed a one percent recovery rate, and the patient share of cost adjustment was based on actual share of cost assignments for July 1991 through June 1992, increased by 3.7 percent (i.e., the cost of living increase in Social Security payments as of July 1992). The Medicare/TPL and patient share of cost adjustments were subtracted from the average institutional per diem to yield an institutional per diem of $193.64, or $5,890.03 per month (the per diem rate multiplied by 30.417 days).

The institutional mix and HCBS mix assumptions were based on actual days of care recorded in the Client Assessment Tracking System (CATS) for the time period July 1991 to June 1992. The capitation rate for HCB services was calculated from actual audited costs experienced by DES in SFY 90, inflated to FY 93 and decreased for mental health services now provided under the AHCCCS

Table 4-4

DERIVATION OF FY 93 CAPITATION RATE
FOR ALTCS MR/DD ELIGIBLES

Average Institutional Per Diem	$201.84
Adjustments:	
Medicare/TPL	(2.02)
Patient Share of Cost	(5.18)
Institutional Per Diem	$193.64
Institutional Capitation Per Month	$5,890.03
Institutional Mix Assumption	0.05
HCB Services Capitation Per Month	$1,787.27
HCB Services Mix Assumption	0.95
LTC Capitation*	$1,992.40
Plus:	
Case Management	$146.83
Administration	$106.96
Acute Services	$265.67
Monthly Capitation	$2,511.87

Source: Letter to Sidney Trieger, HCFA, from Mabel Chen, M.D., AHCCCS Administration, dated October 14, 1992.

* Institutional capitation per month times institutional mix assumption plus HCB services capitation per month times HCB services mix assumption.

mental health program. The adjustment for inflation used the DRI/McGraw Hill home health market basket inflation factor (the SFY 90 rate of $50.10 per day was increased by 15.32 percent). This resulted in a long-term care capitation of $1,992.40 per month,

The long-term care capitation was adjusted for the estimated cost of case management, administration, and acute care services. The case management cost of $146.83 per month was the audited DES costs for SFY 90 inflated to FY 93. The allowance for other administrative expenses ($106.96 per month) was five percent of the long-term care capitation plus case management. The estimated cost of acute care services for MR/DD eligibles ($265.67 per month) was based on a weighted average of the acute care capitation rates paid by DES to their acute care contractors and the estimated fee-for-service expense for areas without acute health plans. Table 4-5 summarizes the derivation of the MR/DD acute care rate for FY 93.

The monthly capitation of $2,511.87 shown at the bottom of Table 4-4 was the agreed rate for all MR/DD eligibles except for those who are ventilator dependent and those who are acute care only MR/DD clients. There are 26 MR/DD clients who are ventilator dependent. The reimbursement rate for these individuals in FY 93 is $11,805.09 per month.

An acute care only client is one who is enrolled with DES but did not receive long-term care services in a given month or who is in an uncertified facility. The FY 93 rate for MR/DD acute care only eligibles is $419.84 per month. This rate was arrived at by adding the estimates for acute services of $265.67 (Table 4-4), case management of $146.83 (Table 4-4), and the administrative allowance of $7.34 (5 percent of case management).

A separate rate is also paid to the Arizona Department of Health Services for mental health services provided to dually diagnosed individuals. A dually diagnosed individual is one who is both developmentally disabled and in need of mental health services. The MR/DD mental health capitation rate for FY 93 is $427.48 per month per dually diagnosed eligible.

Table 4-5

DERIVATION OF FY 93 ACUTE CARE CAPIJAJION RATE FOR MR/DD ELIGIBLES
USING DATA FROM JANUARY 1 JO MARCH 31, 1992

Payments	$3,655,232
Capitation	3,201,011
Estimated Fee-for-service*	454,221
Number of Person-months	15,373
Capitation Per Person Per Month Adjustments:	$237.77
Inflation to FY 93**	17.98
Mental Health Overlap***	(7.46)
Administration	17.38
Acute Services Capitation Rate	$265.67

Source: William M. Mercer, Inc.

* Estimated fee-for-service payments were calculated by multiplying the number of months of coverage (1,800) for those receiving fee-for-service capitation by $235.84 times an inflation adjustment of 7.0%. The rate of $235.84 is the actual average monthly cost of acute services received by fee-for-service beneficiaries from January 1 through March 31, 1992.

** The inflation adjustment was calculated using the change (0.0756) from the period of January 1 through March 31, 1992 to FY 93 in the DRI/McGraw Hill nursing home market basket.

*** The mental health overlap adjustment was calculated by estimating the amount of services that would not now need to be covered under the ALJCS capitation payment. Actual per member per month costs for the period January 1 through March 31, 1992 were used. Estimated percentages of the per member per month cost not needed to be covered under the ALJCS capitation payment were as follows: 7.5% of hospital inpatient expenses, 5.0% of emergency room expenses, and 4.5% of pharmacy expenses. These estimates were developed by William M. Mercer, Inc. for the AHCCCS Administration.

Financial Experience

In this section we describe the financial experience of DES, the statewide program contractor for ALTCS MR/DD eligibles. First, we examine the DES budget appropriations and expenditures for all DES clients in Arizona over the time period SFY 88 to SFY 93. Next, we analyze the financial experience of DES related to providing services to ALTCS eligible MR/DDs in FY 89, FY 90, and FY 91, the first three years of the ALTCS program.

DES Budget Appropriations and Expenditures

Prior to the ALTCS program, the state of Arizona provided long-term care services to MR/DD clients using state funds. To examine the pattern over time in MR/DD expenditures, Table 4-6 presents information on the budget appropriations and expenditures made by DES for MR/DD eligibles. The expenditures shown in Table 4-6 include both long-term and acute care costs and are thus greater than the long-term care expenditures shown in Table 4-3.

Since the start of the program on December 19, 1988, DES has served both ALTCS and non-ALTCS clients. The non-ALTCS clients do not qualify for Title XIX Medicaid services, and the services that they receive are paid for entirely with state funds. Table 4-6 contains information on the source of funds for both ALTCS and state-only clients served by the Division of Developmental Disabilities (DDD) in DES from 1988 to 1993. The data are by state fiscal year (year ending June 30th).

In SFY 88, the year prior to the start of the ALTCS program, the state paid $71.3 million for care provided to MR/DD clients. An additional $59,400 was spent on pre-operational planning for ALTCS.

There were approximately six months of ALTCS program operations in SFY 89. Many of the former state-only MR/DD eligibles became ALTCS eligibles. DES-budget appropriations were $66.2 million for DDD state-only eligibles and

Table 4-6

APPROPRIATIONS AND EXPENDITURES FOR MR/DD ELIGIBLES SERVED BY THE ARIZONA DEPARTMENT OF ECONOMIC SECURITY (in thousands)

	SFY 88	SFY a9	SFY 90	SFY 91	SFY 92	SFY 93*
Appropriations						
Medicaid Eligibles	$ 59.4	$26,781.6	$ 74,021.7	$115,104.3	$137,734.5	$142,480.3
State Funds	9.1	11,477.9	28.588.1	45.954.9	57.110.5	56,186.9
Other Funds	50.3					
State-only Eligibles	71,277.1	66,171.615,303.7	45: 53,456.0 433.6	49,494.9 69: 149.4	80,624.041,185.3	86,293.441,541.3
Total Eligibles	71,336.5	92,953.2	127,477.8	164,599.2	178,919.8	184,021.6
State Funds	71,286.2	77,649.5	82,044.1	95,499.a	98,295.8	97,728.2
Other Funds	50.3	15,303.7	45,433.6	69,149.4	80,624.0	86,293.4
Expenditures						
Medicaid Eligibles	9.1	24,645.1	65,603.1	106,499.2	126,630.1	141,169.2
State Funds	50.3	14,082.910,562.3	40,193.225,409.9	64,073.542,425.7	51,613.775,016.4	85,439.855,729.4
Other Funds						
State-only Eligibles	71,277.1	64,438.1	50,533.7	42,791.1	38,379.9	40,885.2
Total Eligibles	71,336.5	89,083.2	116,136.8	149,290.3	165,010.0	182,054.4
State Funds	71,286.2	78,521.0	75,943.6	85,216.a	89,993.6	96,614.6
Other Funds	50.3	10,562.3	40,193.2	64,073.5	75,016.4	85,439.8

Source: Arizona Department of Economic Security.

* Estimated.

$26.8 million for ALTCS eligibles in fiscal year 1989. Of the $26.8 million, $11.5 million were state funds and $15.3 million were other funds, primarily federal funds. Actual expenditures for SFY 89 were $24.6 million for ALTCS eligibles and $64.4 million for state-only eligibles. Total expenditures for MR/DD eligibles increased from $71.3 million in SFY 88 to $89.1 million in SFY 89, an increase of 25 percent.

Total budget appropriations for SFY 90 were $127.5 million, with $74.0 million for ALTCS eligibles and $53.5 million for state-only eligibles. Thus, for the first full year of the ALTCS program, appropriations for ALTCS eligibles exceeded those for state-only eligibles by $20.5 million, or 38 percent. Actual expenditures for SFY 90 were $65.6 million for ALTCS eligibles and $50.5 million for state-only eligibles. Total expenditures were $116.1 million in SFY 90, an increase of 30 percent over SFY 89. State funds paid for $75.9 million, or 65 percent, of total expenditures. Other funds, primarily federal funds, paid for the remainder of $40.2 million.

In fiscal years 1991 and 1992, total budget appropriations increased to $164.6 million and $178.9 million, respectively. Total expenditures increased to $149.3 million in SFY 91 and $165.0 million in SFY 92. In SFY 93, total budget appropriations are $184.0 million. Total expenditures for fiscal year 1993 are estimated to be $182.1 million. State funds are estimated to pay for $96.6 million, or 53 percent, of total expenditures. Other funds, primarily federal funds, are estimated to pay for $85.4 million of expenditures for MR/DD eligibles. Thus, federal funds for MR/DD eligibles have more than doubled from SFY 90, the first full year of AHCCCS, to SFY 93. Total expenditures for MR/DD eligibles in Arizona have increased by 155 percent from SFY 88, the year before the ALTCS program started, to SFY 93. The increased expenditures are due to increases in both the number of MR/DD eligibles served in Arizona and the cost of services between SFY 88 and SFY 93.

DES ALTCS Financial Experience

Table 4-7 presents information on the financial experience of DES in providing services to ALTCS MR/DD eligibles in FY 89, FY 90, and FY 91. The information is based on the DES audits for fiscal years 1989 and 1990 and the quarterly financial reports submitted to AHCCCS by DES. The data for FY 91 has not been audited and is therefore subject to change.

As shown in Table 4-7, total revenues for FY 89 of $36.1 million consisted of $21.7 million in federal funds, $14.2 million in state funds, and $113,017 in patient share of cost contributions. Total FY 89 expenses of $35.1 million included $21.0 million for long-term care services, $4.8 million for acute care services, and $9.4 million for administration. There was an excess of $916,618 in revenues over expenditures for MR/DD eligibles in FY 89. Revenues exceeded expenditures by 2.54%.

For FY 90, DES had revenues of $79.0 million and expenses of $82.2 million. Thus, expenses exceeded revenues by $3.2 million, or 4.06% of revenues. FY 91 expenses of $115.3 million also exceeded FY 91 revenues of $110.6 million by $4.8 million (4.30%). The FY 91 DES expenses included an estimate of $10.2 million for IBNR claims expenses. If that estimate were to be revised at audit, it could effect the overall findings.

In examining the data, two factors should be considered: the stable federal payment for FY 89 - FY 91 and the relatively large DES administrative costs reported. As discussed earlier, the federal capitation rate was constant for the first three years of the program except for minor changes in the FMAP. This was because the audit of the first year financial experience was not completed until 1992. As shown in Table 4-7, it appears that the initial rates provided sufficient revenue for DES to provide services to MR/DD eligibles in FY 89. However, as costs increased in FY 90 and FY 91, it became more difficult for DES to provide services within the capitation revenues. Shortfalls were made up with state funds because DES is a state agency.

Table 4-7

SUMMARY OF DES REVENUES AND EXPENDITURES FOR ALTCS
MR/DD ELIGIBLES FOR FY 89, FY 90, AND FY 91

	FY 89	FY 90	FY 91	Total
Revenues	$36,062,033	$78,987,844	$110,553,311	$225,603,188
Federal	21,712,173	48,200,873	62,349,178	132,262,224
Interim Capitation	24,069,358	47,805,051	62,349,178	134,223,587
Reconciliation*	(2,357,185)	395,822	0	(1,961,363)
State	14,236,843	30,544,499	47,665,690	92,447,032
Patient Share of Cost	113,017	242,472	378,385	733,874
Interest	0	0	158,885	158,885
Coordination of Benefits	0	0	1,173	1,173
Expenses	35,145,415	82,197,729	115,303,359	232,646,502
Long-Term Care	20,952,277	49,340,573	62,075.479	132,368,329
Acute Care	4,787,282	17,770,930	22,239,170	44,797,382
Incurred But Not Reported (IBNR)	0	0	10,245,826	10,245,826
Administration	9,405,856	15,086,225	20,742,884	45,234,965
Excess of Revenues over Expenses	916,618	(3,209,884)	(4,750,048)	(7,043,314)
Excess as percentage of revenues	2.54%	(4.06%)	(4.30%)	(3.12%)

Source: DES audits for SFY 89 and SFY 90, Quarterly Financial Reports submitted to AHCCCS by DES for ALTCS MR/DD eligibles.

* A financial reconciliation between HCFA and Arizona was completed for SFY 89 and SFY 90 actual costs incurred by DES for MR/DD eligibles. The reconciliation for SFY 91 has not yet been completed.

The second factor is the level of administrative costs experienced by DES. As a percentage of revenue, DES administrative costs were 26% in FY 89 and 19% in both FY 90 and FY 91. The high costs in FY 89 might be explained by start-up costs; however, DES administrative costs are a substantial percentage of program revenues in all three years.

For the first three years of the ALTCS program, the expenses incurred by DES for MR/DD eligibles exceeded revenues by $7.0 million (or 3.12% of revenues). These results do not take account of any financial reconciliation between HCFA and Arizona which might occur in the future for fiscal year 1991.

, EPD Program Contractors

The second major issue to be examined in this chapter concerns how the capitation rates were established for the EPD program contractors in FY 92 and FY 93, the fourth and fifth years of the ALTCS program. It also includes a discussion of the financial experience of the ALTCS EPD program contractors in FY 91. The methods for setting the first, second, and third year capitation rates and the financial experience of the contractors for the first and second years were discussed in the first two Implementation and Operation Reports.

Setting the Caoitation Payments in FY 92 and 93

A similar approach was used to set the capitation rates for the contractors in both FY 92 and FY 93, which were renewal years. In FY 91, the most recent bid year, each contractor was required to solicit bids for providing ALTCS services from nursing homes and other major providers. The AHCCCS Administration reviewed the average nursing home per diem rates that were bid, and where they deemed appropriate, asked contractors to reduce their projected rates. Contractors were to do this by renegotiating rates with providers, dropping providers and/or recalculating their average institutional per diem rate. In some cases, contractors were required to ask for several best and final offers from their current and potential nursing home providers.

Table 4-8 illustrates how the FY 92 rates were derived for Maricopa LTC, Pima Health System (PHS), Pinal LTC, APIPA, and CAP. The first step was to establish the average institutional per diem rate. This weighted average nursing home per diem cost was based on rates negotiated between each contractor and its nursing home providers for FY 91, increased for inflation -according to the fee-for-service increase rate. In addition to regular SNF and ICF care, the average per diem institutional rate included special categories of long-term institutional care such as subacute care, rehabilitation, respiratory care, pediatrics, wandering dementia, and special behavioral problems. The FY 91 per diem rate used as the base rate for FY 92 capitation rate development was a weighted average rate, with the weights corresponding to the distribution of patients across nursing homes by level of care. The average institutional per diem rates in FY 92 were $75.54 for Maricopa LTC, $75.78 for PHS, $77.94 for CAP, $72.58 for Pinal LTC, and $72.32 for APIPA.

The next three rows in Table 4-8 are adjustments to the average institutional per diem rate for the following factors: 1) Medicare/TPL, 2) patient share of cost, and 3) the capitation lag factor. As an example, the institutional per diem rate of $59.06 for Maricopa LTC in FY 92 was determined by subtracting $0.76 per day for Medicare/TPL, $15.46 per day for patient share of cost, and $0.26 per day for the capitation lag factor.

The adjustment for Medicare/TPL is for nursing home days that were paid by Medicare or other third parties. The adjustment factor for Medicare/TPL used in the derivation of the FY 92 rate was based on the experience of the program contractors in FY 91. The adjustment for patient share of cost of $15.46 per day was estimated based on Long-Term Care Eligibility Determination Subsystem/Client Assessment Tracking System (LEDS/CATS) data. The last adjustment factor was for capitation lag. The capitation lag factor is an adjustment to account for differences between the dates of enrollment and the actual start dates of medical service delivery. It was estimated that the average institutional per diem rate should be reduced by 0.42 percent to account for days of enrollment during which no services were being received.

Table 4-8

DERIVATION OF FY 92 CAPITATION RATES FOR MARICOPA LTC, PHS, CAP, PINAL LTC, AND APIPA

	Maricopa LTC	PHS	CAP	Pinal LTC	APIPA
Average Institutional Per Diem	$75.54	$75.78	$77.94	$72.58	$72.32
Adjustments:					
Medicare/TPL	(0.76)	(0.76)	(0.78)	(0.73)	(0.72)
Patient Share of Cost	(15.46)	(15.78)	(14.89)	(11.24)	(16.11)
Capitation Lag	(0.26)	(0.26)	(0.26)	(0.25)	(0.25)
Institutional Per Diem	$59.06	$58: 98	$62.01	$60.36	$55.24
Institutional Capitation Per Month	$1,801.53	$1,798.80	$1,891.15	$1,841.17	$1,684.64
Institutional Mix Assumption	0.78	0.79	0.80	0.75	0.82
HCB Services Capitation Per Month	$623.39	$802.42	$397.74	$628.50	$408.37
HCB Services Mix Assumption	0.22	0.21	0.20	0.25	0.18
LTC Capitation*	$1,542.34	$1,589.56	$1,592.47	$1,538.00	$1,454.91
Plus:					
Case Management	$76.65	$76.65	$69.43	$76.65	$76.65
Administration	$80.95	$83.31	$132.95	$96.88	$122.52
Acute Services	$243.05	$235.00	$225.00	$235.00	$225.00
Monthly Capitation	$1,942.99	$1,984.52	$2,019.85	$1,946.53	$1,879.09

Source: Letter to Sidney Trieger, HCFA, from Mabel Chen, M.D., AHCCCS Administration, dated September 27, 1991.

* Institutional capitation per month times institutional mix assumption plus HCB services capitation per month times HCB services mix assumption.

After all adjustments, the institutional rate for Maricopa LTC in FY 92 was $59.06 per day, or $1,801.53 per month.

The next step in the derivation was to determine the long-term care capitation rate. This rate was a weighted average of the monthly rates for institutionalized patients and users of HCB services. In the fourth year of the program, FY 92, the mix assumption for Maricopa LTC was 78 percent institutionalized patients and 22 percent HCBS users. For Maricopa LTC in FY 92, the average estimated monthly cost of HCB services was $623.39, and the weighted average LTC capitation, assuming a mix of 78 percent institutionalized patients and 22 percent HCBS users, was $1,542.34.

The final set of adjustments for development of the FY 92 capitation rates for the contractors were for: 1) case management, 2) administration, and 3) acute care services. The fourth year case management fee was increased by 5.0 percent over the third year, from $73.00 to $76.65 per month. The increase for case management was based on an employment survey conducted by DES for RNs, LPNs, and aides. Five percent of long,-term care capitation plus case management was added for long-term care contractor administrative costs in Maricopa LTC and PHS. A higher administrative percentage was negotiated with the three private contractors, Ventana Health System (VHS), CAP, and APIPA. Finally, the capitation amount for acute care services for ALTCS eligibles was added to the monthly LTC capitation rate. As shown in Table 4-8, the monthly amounts added in FY 92 for administration and acute care services were $80.95 and $243.05, respectively, for Maricopa LTC. Thus, the monthly capitation rate paid to Maricopa LTC in FY 92 was $1,942.99.

The same basic method was used for development of the monthly capitation rate for all of the program contractors. Table 4-9 shows the FY 92 capitation rates for the counties served by VHS. All of the lines in Table 4-9 are the same as the lines in Table 4-8 except for the line "Contract Negotiations" which is included in the VHS tables as a county-specific adjustment between AHCCCS and VHS for differences in the HCBS mix assumptions for the counties served by VHS and other factors.

Table 4-9

DERIVATION OF FY 92 CAPITATION RATES FOR COUNTIES
SERVED BY VENTANA HEALTH SYSTEMS

	Navajo	Greenlee/ Graham	Yavapai	Gila
Average Institutional Per Diem	$74.16	$73.56	$72.72	$72.42
Adjustments:				
Medicare/TPL	(0.74)	(0.74)	(0.73)	(0.72)
Patient Share of Cost	(16.59)	(11.39)	(14.13)	(13.28)
Capitation Lag	(0.25)	(0.25)	(0.25)	(0.25)
Institutional Per Diem	$56.58	$61.18	$57.61	$58.17
Institutional Capitation Per Month	$1,725.44	$1,866.25	$1,757.18	$1,774.23
Institutional Mix Assumption	0.78	0.78	0.78	0.78
HCB Services Capitation Per Month	$314.04	$314.14	$323.06	$308.37
HCB Services Mix Assumption	0.22	0.22	0.22	0.22
LTC Capitation*	$1,414.93	$1,524.78	$1,441.67	$1,451.74
Adjustments:				
Case Management	$76.69	$75.38	$76.32	$74.87
Administration	$119.33	$128.01	$121.44	$122.13
Acute Services	$220.00	$220.00	$220.00	$220.00
Contract Negotiation	$8.13	$14.17	(2.78)	$3.96
Monthly Capitation	$1,839.08	$1,962.35	$1,856.66	$1,872.70

Table 4-9 (Concluded)

DERIVATION OF FY 92 CAPITATION RATES FOR COUNTIES SERVED BY VENTANA HEALTH SYSTEMS

	La Paz/ Mohave	Cochise	VHS Weighted Average
Average Institutional Per Diem	$71.36	$72.20	$72.48
Adjustments:			
Medicare/TPL	(0.71)	(0.72)	(0.72)
Patient Share of Cost	(15.24)	(13.65)	(14.03)
Capitation Lag	(0.24)	(0.25)	(0.25)
Institutional Per Diem	$55.17	$57.58	$57: 48
Institutional Capitation Per Month	$1,682.55	$1,756.13	$1,753.09
Institutional Mix Assumption	0.78	0.78	0.78
HCB Services Capitation Per Month	$314.64	$320.24	$316.76
HCB Services Mix Assumption	0.22	0.22	0.22
LTC Capitation*	$1,381.61	$1,440.24	$1,437.10
Adjustments:			
Case Management	$75.43	$77.06	$75.99
Administration	$116.56	$121.38	$121.05
Acute Services	$220.00	$220.00	$220.00
Contract Negotiation	(8.19)	$21.79	$4: 76
Monthly Capitation	$1,785.42	$1,880.47	$1,858.89

Source: Letter to Sidney Trieger, HCFA, from Mabel Chen, M.D., AHCCCS Administration, dated September 27, 1991.

* Institutional capitation per month times institutional mix assumption plus HCB services capitation per month times HCB services mix assumption.

In FY 92, HCBS expenses were compared at mid-year for Maricopa LTC, PHS, and Pinal LTC to assure that they were on target. HCBS expenses for FY 92 were not reconciled to 90% of the HCBS budget, as had been done in previous years.

An incentive for contractors to increase the number of HCBS clients was introduced in FY 92. Any contractor whose actual HCBS mix exceeded the assumed HCBS mix by more than 0.5% was allowed to keep the difference between institutional and HCBS capitation for 0.5% of member months during FY 92. The difference between the assumed and actual HCBS mix was referred to as the HCBS "window."

After the end of FY 91, a reconciliation of actual costs of HCB services compared to original budgeted HCBS expenditures was conducted. Each contractor was required to spend at least 90 percent of the budgeted amount for HCB services. If they did not spend 90 percent of the amount budgeted, the difference was recouped by AHCCCS. For FY 91, PHS, Pinal LTC, and CAP spent in excess of the 90 percent minimum spending level. Maricopa LTC, APIPA, and VHS spent less than the 90 percent target and returned funds to AHCCCS. For FY 91, VHS returned $215,785.47, Maricopa LTC returned $85,732.29, and APIPA returned $72,740.38.

Table 4-10 shows the calculations that were involved in determining the amount returned by Ventana for HCB services in FY 91. The first row of Table 4-10 is the number of member months of enrollment for each county served by VHS. The second row is the budgeted amount for HCB services that was paid to VHS by AHCCCS (HCBS Rate Paid). The third row is the minimum HCB expenditure rate, which is 90 percent of the budgeted amount. The fourth row consists of the actual monthly expenditure rate for HCB services by VHS. The fifth row is the total HCB expenditures in FY 91 for each county served by VHS. The sixth row is the minimum FY 91 expenditures based on 90 percent of the budgeted amount. The seventh row is the amount due to AHCCCS from VHS for spending less than the minimum expenditures. It should be noted that the expenditures in Table 4-10 may not equal the monthly rates times the number of member months because of rounding in the number of member months.

Table 4-10

FINAL FY 91 HCBS RECONCILIATION FOR
VENTANA HEALTH SYSTEMS BY COUNTY

	Cochise	Gila	Graham	Greenlee	Mohave	Navajo
Member Months*						
10/1/90 - 9/30/91	530	446	221	38	451	274
Rates**						
HCBS Rate Paid	$395.29	$375.79	$394.94	$394.94	$379.94	$397.81
90% of HCBS Rate Paid	$355.76	$338.21	$355.45	$355.45	$341.95	$358.03
Actual HCBS Rate	$276.40	$262.77	$276.16	$276.16	$265.67	$278.17
Expenditures						
Actual	$146,629	$117,066	$61,090	$10,379	$119,940	$76,311
Minimum	$188,727	$150,676	$78,629	$13,359	$154,375	$98,221
Refund Due to AHCCCS	$42,098	$33,610	$17,539	$2,980	$34,435	$21,910

Table 4-10 (Concluded)

FINAL FY 91 HCBS RECONCILIATION FOR
VENTANA HEALTH SYSTEMS BY COUNTY

	Yavapai	La Paz	VHS Total
Member Months*			
10/1/90 - 9/30/91	755	47	2762
Rates**			
HCBS Rate Paid	$393.71	$379.94	$389.16
90% of HCBS Rate Paid	$354.34	$341.95	$350.24
Actual HCBS Rate	$275.30	$265.67	$272.12
Expenditures			
Actual	$207,823	$12,357	$751,595
Minimum	$267,489	$15,905	$967,381
Refund Due to AHCCCS	$59,666	$3,548	$215,786

Source: Letter to Fred Teitelbaum, AHCCCS Administration, from Christina Thomeczek, Mercer, dated February 18, 1992.

* Member months were weighted by each county's percent of enrollment at 10/1/91 to get splits by county. Number of months shown in table have been rounded to nearest whole number.

** The total column for rates contains the weighted average rate. County rates are weighted by the number of member months in the county.

For the fifth year of the ALTCS program, FY 93, the method used for setting capitation rates for long-term care program contractors was similar to the method used for FY 92, although there were some changes. Table 4-11 contains the capitation rates developed for Maricopa LTC, PHS, Pinal LTC, APIPA, and CAP. The FY 93 capitation rates developed for the eight rural counties served by VHS are shown in Table 4-12.

There were three major changes in the development of EPD capitation rates in FY 93. First, the HCBS mix assumption was increased for all of the EPD contractors. The assumed proportions of users of HCB services for FY 92 and FY 93 were:

EPD Contractor	FY 92	FY 93
Maricopa LTC	22%	25%
PHS	21	25
VHS	22	23
CAP	20	22
Pinal LTC	25	30
APIPA	18	22

In addition, two new factors were incorporated in the capitation rate development process for FY 93: "client management supplemental" and "interest deduction." The client management supplemental factor was intended to compensate EPD contractors that had high proportions of HCBS users for the greater case management needs of these clients. For FY 93, the client management supplemental was $3.14 per month, and it was applicable to EPD contractors that had HCBS mix assumptions of 25 percent or greater. The interest deduction factor was intended to account for the delay between receipt of capitation revenues and payment for long-term care services. The interest deduction was calculated at 0.75 percent per month based on an interest rate of six percent per year and average cash on hand of 45 days.

There were also four additional minor changes made in EPD capitation rate-setting. Two of the changes were designed to provide incentives to EPD program contractors to achieve an actual HCBS mix higher than the assumed HCBS mix upon which the initial capitation rate was based. First, the HCBS

Table 4-11

DERIVATION OF FY 93 CAPITATION RATES FOR MARICOPA LTC, PHS, CAP, PINAL LTC, AND APIPA

	Maricopa LTC	PHS	CAP	Pinal LTC	APIPA
Average Institutional Per Diem	$79.62	$79.26	$81.44	$77.98	$76.00
Adjustments:					
Medicare/TPL	(0.80)	(0.79)	(0.81)	(0.78)	(0.76)
Patient Share of Cost	(16.19)	(15.00)	(15.31)	(13.62)	(16.94)
Capitation Lag	(0.27)	(0.27)	(0.28)	(0.27)	(0.26)
Institutional Per Diem	$62.36	$63.20	$65.04	$63.31	$58.04
Institutional Capitation Per Month	$1,896.86	$1,922.18	$1,978.43	$1,925.81	$1,765.45
Institutional Mix Assumption	0.75	0.75	0.78	0.70	0.78
HCB Services Capitation Per Month	$653.93	$841.74	$397.88	$659.30	$346.85
HCB Services Mix Assumption	0.25	0.25	0.22	0.30	0.22
LTC Capitation*	$1,586.13	$1,652.07	$1,630.71	$1,545.86	$1,453.36
Adjustments:					
Case Management	$80.41	$80.41	$72.83	$80.41	$80.41
Administration	$83.33	$86.62	$119.25	$81.31	$93.13
Acute Services	$260.46	$254.10	$241.50	$252.00	$241.50
Client Management Supplemental	$3.14	$3.14	$0.00	$3.14	$0.00
Interest Deduction	(15.10)	(15.57)	(15.48)	(14.72)	$0.00
Monthly Capitation	$1,998.36	$2,060.77	$2,048.80	$1,948.00	$1,868.40

Source: Letter to Sidney Trieger, HCFA, from Mabel Chen, M.D., AHCCCS Administration, dated August 31, 1992.

* Institutional capitation per month times institutional mix assumption plus HCB services capitation per month times HCB services mix assumption.

Table 4-12

DERIVATION OF FY 93 CAPITATION RATES FOR COUNTIES
SERVED BY VENTANA HEALTH SYSTEMS

	Navajo	Greenlee/ Graham	Yavapai	Gila
Average Institutional Per Diem	$77.49	$76.87	$75.99	$75.68
Adjustments:				
Medicare/TPL	(0.77)	(0.77)	(0.76)	(0.76)
Patient Share of Cost	(16.79)	(13.46)	(14.77)	(14.87)
Capitation Lag	(0.26)	(0.26)	(0.26)	(0.26)
Institutional Per Diem	$59: 66	$62: 38	$60: 20	$59.80
Institutional Capitation Per Month	$1,814.78	$1,897.53	$1,831.11	$1,818.82
Institutional Mix Assumption	0.72	0.72	0.76	0.80
HCB Services Capitation Per Month	$278.21	$278.30	$286.21	$273.19
HCB Services Mix Assumption	0.28	0.28	0.24	0.20
LTC Capitation*	$1,384.54	$1,444.14	$1,460.33	$1,509.70
Adjustments:				
Case Management	$80.45	$79.07	$80.06	$78.53
Administration	$102.55	$106.63	$107.83	$111.18
Acute Services	5231.06	$231.06	$231.06	$231.06
Client Management Supplemental	60.00	$0.00	$0.00	$0.00
Interest Deduction	(13.49)	(13.96)	(14.09)	(14.48)
Monthly Capitation	$1,785.11	$1,846.94	$1,865.19	$1,915.98

Table 4-12 (Concluded)

DERIVATION OF FY 93 CAPITATION RATES FOR COUNTIES
SERVED BY VENTANA HEALTH SYSTEMS

	La Paz/ Mohave	Cochise	VHS Weighted Average
Average Institutional Per Diem	$74.57	$75.44	$75.73
Adjustments:			
Medicare/TPL	(0.75)	(0.75)	(0.76)
Patient Share of Cost	(15.57)	(14.45)	(14.90)
Capitation Lag	(0.25)	(0.26)	(0.26)
Institutional Per Diem	$58.00	$59.98	$59.81
Institutional Capitation Per Month	$1,764.28	$1,824.49	$1,819.37
Institutional Mix Assumption	0.74	0.81	0.77
HCB Services Capitation Per Month	$278.74	$283.71	$281.07
HCB Services Mix Assumption	0.26	0.19	0.23
LTC Capitation*	$1,378.04	$1,531.75	$1,458.85
Adjustments:			
Case Management	$79.13	$80.84	$79.74
Administration	$102.00	$112.88	$107.70
Acute Services	$231.06	$231.06	$231.06
Client Management Supplemental	$0.00	$0.00	$0.00
Interest Deduction	(13.43)	(14.68)	(14.08)
Monthly Capitation	$1,776.80	$1,941.84	$1,863.26

Source: Letter to Sidney Trieger, HCFA, from Mabel Chen, M.D., AHCCCS Administration, dated August 31, 1992.

* Institutional capitation per month times institutional mix assumption plus HCB services capitation per month times HCB services mix assumption.

"window" incentive changed slightly from FY 92. For urban contractors with an assumed HCBS mix of 25 percent or more and rural contractors with an HCBS mix of 22 percent or more, AHCCCS would only recoup the difference between the capitation for an institutionalized patient and the capitation for an HCBS client for actual HCBS mix more than 0.5 percentage points more than the assumed HCBS mix. In addition, the difference would only be recouped for those member months in excess of 0.5 percentage points above the assumed HCBS mix. This change meant that contractors meeting the conditions (assumed 25 percent HCBS mix for urban contractors, or 22 percent for rural contractors) could enroll HCBS users up to 0.5 percentage points above the assumed HCBS mix without returning any of the excess capitation. For contractors not meeting the conditions, AHCCCS would recoup the difference between institutional and HCBS capitation for all member months in excess of the assumed HCBS mix. For FY 93, all urban and rural program contractors agreed to assumed HCBS mix percentages of at least 25 percent and 22 percent, respectively. This provision also encouraged contractors to accept higher HCBS mix percentages than they had accepted in previous years (at least 22 percent for rural and 25 percent for urban contractors).

The second incentive related to the increased case management costs for contractors with actual HCBS mix that exceeded the assumed HCBS mix by more than 0.5 percentage points. For FY 93, AHCCCS will retrospectively increase the case management portion of the capitation rate for these contractors to reflect the increase in case management staffing necessary for the increased proportion of HCBS clients.

The third change involved the method of calculating the increases in the FY 92 average nursing home per diem rates that would be applicable for FY 93. For FY 92, the FY 91 nursing home rates was increased by the rate of increase in the AHCCCS fee-for-service nursing home rates. For FY 93, the rate of increase was the larger of two rates. The first was the percentage increase in the AHCCCS fee-for-service rates. The second was the percentage increase in the number of nursing care minutes. The number of nursing care minutes was estimated in both years from the preadmission screening instruments using a

methodology which takes into account the level of impairment (number of ADLs failed) and the nursing treatments received (or needed) by each eligible.

The final change for FY 93 was in regard to AHCCCS negotiations with the program contractors for capitation of ventilator dependent patients. Prior to FY 93 ventilator dependent patients were handled on a fee-for-service basis. The monthly capitation rates negotiated by AHCCCS for ventilator dependent ALTCS eligibles in FY 93 were: Maricopa LTC, $8,440.98; PHS, $8,460.69; VHS, $8,568.09; CAP, $8,573.34; Pinal LTC, $8,485.76; and APIPA, $8,551.04. CAP, Pinal LTC, and APIPA asked to be exempted.from ventilator-dependent capitation on the grounds that they did not have enough ventilator-dependent clients over which to spread the risk. AHCCCSA agreed. These three contractors were paid a case management fee for ventilator-dependent clients, plus fee-for-service for all other services received by ventilator-dependent clients in FY 93. This was the same method for reimbursing ventilator-dependent patients as had been used for these contractors in prior years.

As shown in Tables 4-11 and 4-12, the FY 93 rate-setting assumptions for EPD contractors included a 1 percent recovery rate for Medicare/TPL. This was consistent with the assumption used in FY 92. The patient share of cost factor was based on LEDS/CATS data, which was increased by 3.7 percent for the cost of level increase in Social Security payments; Therapies were not included as a separate line item for FY 93 but were added to the acute care rate. The capitation lag was based on the number of days not placed in the first 30 days of enrollment with a contractor. The HCBS rate for each contractor was based on actual HCBS expenditures for the period from October 1, 1991 to March 31, 1992, increased by 4.9 percent (the DRI/McGraw Hill home health inflator). For FY 93, the FY 92 case management rate was also inflated by 4.9 percent. The additional allowance for other administrative costs for FY 93 was 5 percent for all contractors, with the non-county contractors (CAP, VHS, and APIPA) receiving an additional 2 percent for profit. Acute care rates were inflated by 5 percent from FY 92 to FY 93. As discussed above, the FY 93 rates also included an interest deduction of 0.75 percent and a "client management supplemental" of $3.14 for contractors with an assumed HCBS mix of 25 percent or more.

Table 4-13 provides a summary of the monthly capitation payments made by AHCCCS to the program contractors for FY 91, FY 92, and FY 93. These payments included acute and long-term care services. In FY 91, the payments to program contractors ranged from a low of $1,776.24 for Pinal LTC to a high of $1,918.71 for CAP. The two largest contractors, Maricopa LTC and PHS, had capitation rates of $1,891.19 and $1,887.92, respectively. The eight counties served by VHS had a narrow range from a low of $1,833.69 for La Paz and Mohave counties to a high of $1,887.64 for Graham and Greenlee counties.

The percentage increases in the monthly capitation payments from FY 91 to FY 92 and from FY 92 to FY 93 are also shown in Table 4-13. From FY 91 to FY 92, Pinal LTC had the largest increase, 9.6 percent. VHS was the only contractor to experience a decrease (0.2 percent). The weighted average increase for all contractors in FY 92 was 2.9 percent. From FY 92 to FY 93, PHS had the largest increase, 3.8 percent, and APIPA was the only contractor to experience a decrease (0.6 percent). The weighted average increase for all contractors in FY 93 was 2.4 percent. It should be noted that these rates of increase in monthly capitation payments are significantly affected by changes in HCBS mix. A contractor that increases its HCBS mix will experience lower average monthly expenditures, which are accordingly reflected in the contractor's rate.

Financial Experience

This section examines the financial experience of the EPD program contractors that are participating in the ALTCS program for FY 91, the third year of the program. The contractors' financial experience in the first and second program years, FY 89 and FY 90, was examined in the first two Implementation and Operation Reports.

The main sources of data to be used in this evaluation are the audited financial statements and other financial reports submitted to the AHCCCS Administration in response to program financial reporting requirements for

Table 4-13

SUMMARY OF AHCCCS PAYMENT RATES* TO PROGRAM CONTRACTORS
FOR FY 91, FY 92, AND FY 93
(contractors are presented in order of size)

	FY 91	FY 92	FY 93	FY 91 - FY 92 % Increase	FY 92 - FY 93 % Increase
Maricopa LTC					
Maricopa	$1,891.19	$1,942.99	$1,998.36	2.7%	2.8%
PHS					
Pima	1,887.92	1,984.52	2,060.77	5.1	3.8
VHS	1,862.24	1,858.89	1,863.26	-0.2	0.2
Navajo	1,866.27	1,839.08	1,785.11	-1.5	-2.9
Greenlee/Graham	1,887.64	1,962.35	1,846.94	4.0	-5.9
Yavapai	1,873.83	1,856.66	1,865.19	-0.9	0.5
Gila	1,864.56	1,872.70	1,915.98	0.4	2.3
La Paz/Mohave	1,833.69	1,785.42	1,776.80	-2.6	-0.5
Cochise	1,861.96	1,880.47	1,941.84	1.0	3.3
Pinal LTC					
Pinal	1,776.24	1,946.53	1,948.00	9.6	0.1
APIPA					
Yuma	1,868.95	1,879.09	1,868.40	0.5	-0.6
CAP					
Coconino	1,918.71	2,019.85	2,048.80	5.3	1.4
Weighted Average	1,881.81	1,936.77	1,984.21	2.9	2.4

Source: AHCCCS Administration.

* Payment rates include acute and long-term car services.

participating ALTCS program contractors. The source of information on reporting requirements for financial data and other information by participating ALTCS program contractors is the "Audit Guide for Audits of Health Care Contractors with the Arizona Health Care Cost Containment System." This manual is published and maintained by the AHCCCS Office of Managed Care.

The "Audit Guide" was developed based on the rules and regulations of the AHCCCS program and identifies the specific reporting responsibilities for the participating plans. Table 4-14 shows the current reports required of ALTCS program contractors and the schedule for delivery. Some of the required reports are due on a monthly basis, others are due on a quarterly basis, and others are due on an annual basis.

Three major reports that are due from participating ALTCS contractors on a quarterly basis are: Balance Sheet, Statement of Revenues and Expenses, and Analysis of Health Care Costs by Major Rate Code Classification. All of these reports must be submitted to AHCCCS within 45 days after the end of the quarter. These reports have similar formats to the reports required from AHCCCS prepaid health plans. However, the reports have been modified for contractors providing long-term care as well as acute services.

In the Statement of Revenues and Expenses, ALTCS contractors must report revenues in the following categories: capitation, reinsurance, patient contributions (Social Security, third party reimbursement, estate recoveries, other), interest income, and other revenue. Expenses must be reported for institutional care (SNF, ICF, ICF/MR, inpatient hospital), HCB services (home health, homemaker, personal care, adult day care, habilitation, respite care, transportation, hospice, home delivered meals, other), outpatient medical services (physician, laboratory, x-ray, pharmacy, other), and administrative expense (salary, case management, data processing, management fees, insurance, interest, other).

In the Rate Code Classification Report, quarterly expenditures are reported by: 1) type of medical service, and 2) patient category. Types of medical service include long-term care institutional, HCB services, acute

Table 4-14

COST REPORTS REQUIRED FROM ALTCS PROGRAM CONTRACTORS TO AHCCCS

Report	Due Date
Preliminary annual audit and financial statements	90 days after fiscal year end
Final annual audit and financial statements	120 days after fiscal year end
Financial disclosure report	120 days after fiscal year end
Annual analysis of health care cost by rate code classification	120 days after fiscal year end
Reconciliation - annual audit to year-to-date financial information	120 days after fiscal year end
Quarterly balance sheet	45 days after end of quarter
Quarterly statement of revenues and expenditures	45 days after end of quarter
Quarterly rate code classification report	45 days after end of quarter
Monthly claims reports	30 days after end of month

Source: State of Arizona - Arizona Long-Term Care System: Request for Proposal, September, 1988.

medical services, and other. Patient categories include Medicare and non-Medicare.

Audited financial statements are due each year for each participating plan. In addition, the following reports are also required on an annual basis: Annual Analysis of Health Care Costs by Major Rate Code Classification, Reconciliation of Annual Audit and Plan Year-to-date Financial Report Information, and Financial Disclosure Report. The purpose of the annual rate code report is to summarize the four quarterly rate code reports and to include any relevant adjustments after the annual audit. The purpose of the reconciliation report is to identify and explain any adjustments or discrepancies between the annual audited financial statements and the interim financial reports that were submitted to AHCCCS on a quarterly basis. The purpose of the Financial Disclosure Report is to document the ownership and control of the contracting organization and any relevant related party transactions. The disclosure statement must include objective justifications for the reasonableness of related party transactions. In addition, the contractor must abide by the requirements in the detailed policy statement entitled "AHCCCS Policy on Financial Disclosure for Ownership and Control and Related Party Transactions" that is included in the "Audit Guide." All of these annual reports are due to AHCCCS within 120 days after the end of the contractor's fiscal year.

The Claims Aging Analysis Reports are the primary monthly reports that are due from every contractor. However, if a contractor has experienced financial problems or is being monitored by AHCCCS, then the Office of Managed Care and can require the following additional reports on a monthly basis: Balance Sheet, Statement of Revenues and Expenditures, Utilization Table, and Notes and Disclosures to Financial Reports. If these reports are required, they are due at AHCCCS 45 days after the end of the month.

The primary financial reports used in this component of the evaluation are the balance sheets, statements of revenues and expenses, and rate code classification reports which are submitted by each ALTCS contractor on a quarterly basis. Although the annual and quarterly financial reports

represent the best available information on costs experienced by long-term care contractors, a number of caveats should be noted concerning the data. First, some contractors (Maricopa LTC and PHS) have fiscal years ending June 30th. Therefore, the data for the quarter ending September 30, 1991 corresponds to the quarterly financial report for that period and the information is unaudited and thus subject to change. Consequently, the results reported in this section should be considered preliminary.

Second, two of the contractors, Maricopa LTC and PHS, are components of large, county government organizations. As a result, identification and measurement of administrative costs for the ALTCS program depends upon the method used for allocation of expenses. For example, to determine administrative costs for Maricopa LTC, there are three major county funds that are related to ALTCS operations: Maricopa County Health Plan (AHCCCS acute care plan), Maricopa LTC fund, and ALTCS program operations. The Maricopa LTC fund was responsible for financing long-term care services in Maricopa County prior to ALTCS and still provides services to non-ALTCS eligibles in the county residual population. A new county fund was set up for the ALTCS program. To determine ALTCS administrative costs, indirect cost pools were established for each of the above funds. Allocation methods were then employed to determine the amount of indirect expenses that were allocable to each fund (e.g., to spread indirect costs in an equitable manner across funds). The allocation method used weighted member-months as the basic mechanism for allocation of costs. The number of member-months of eligibility for persons covered by each fund were weighted according to the relative use of services by each eligibility category.

Third, the private contractors operate very differently from the county-based contractors. VHS, CAP, and APIPA are private-sector business organizations while Maricopa LTC, PHS, and Pinal LTC operate as part of government agencies. Fourth, the way that plans report data on the required financial reports differ from contractor to contractor. For example, VHS reports data processing, insurance and interest expense as part of their management fee.

Table 4-15 presents a summary of ALTCS revenues and expenditures for the long-term care contractors for the period from October 1, 1990 to September 30, 1991. The revenue and expense categories are listed as rows of Table 4-15. The columns of the table correspond to each of the EPD long-term care program contractors: Maricopa LTC, PHS, VHS, Pinal LTC, APIPA, and CAP.

Table 4-16 contains information on ALTCS revenues and expenditures for the long-term care program contractors on a per member per month basis. In Table 4-16, the revenues/expenditures for each component of Table 4-15 is divided by the number of member-months for each contractor. The number of member-months is presented in Table 4-17 for the long-term care contractors.

Maricooa LTC

For FY 91, the third year of the ALTCS program, Maricopa LTC reported a total of $129.2 million in revenues and $127.5 million in expenditures. On a per member-month basis, Maricopa LTC revenues were $2,300.47 per member per month, and its incurred expenses were $2,271.88 per member per month. The largest expenditure category was $72.7 million for SNF institutional care. Capitation revenue from AHCCCS was $104.2 million or $1,856.47 per member per month in FY 91.

PHS

PHS is a division of the Pima County government. It manages the operation of both an AHCCCS acute care plan and the ALTCS contract for EPD long-term care beneficiaries in Pima County. For the third year of ALTCS operations, PHS had revenues of $41.1 million and expenditures of $43.8 million. On a per member per month basis, revenues were $2,189.79 and expenses were $2,337.78.

Table 4-15

FY 91 REVENUES AND EXPENSES FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	Maricopa LTC	PHS	VHS	Pinal LTC
Revenue	$129,150,737	$41,069,567	$34,163,316	$6,577,032
Capitation*	104,224,137	34,432,357	28,378,178	5,570,106
Reinsurance	747,906	0	53,460	57,842
Patient Contributions (Includes Social Security)	19,859,116	6,510,487	5,341,081	874,970
Coordination of Benefits	0	0	0	0
Case Management Fee for Ventilator Dependent	22,808	0	0	4,991
Fee-for-Service Payments for Ventilator Dependent	1,614,381	0	0	0
Interest Income	2,656,068	126,696	388,967	69,123
Other	26,321	27	1,630	0
Expenses	127,545,609	43,845,147	32,123,145	6,053,642
Health Care Costs	118,645,158	40,564,236	29,734,750	5,616,250
Institutional Care	98,620,102	34,336,581	25,145,115	4,738,300
SNF	72,719,329	23,372,282	16,357,528	3,226,568
ICF	25,504,618	10,177,303	8,787,587	1,477,589
Therapies (not rendered as an inpatient in ahospital)	396,155	786,996	0	0
Other	0	0	0	34,143
HCB Services	5,492,593	1,479,689	1,071,601	157,853
Home Health	636,164	252,533	233,494	69,276
Nurse	309,210	234,481	169,686	29,394
Aide	326,954	18,052	63,808	39,882
Therapy	0	68,378	7,618	0
Attendant Care	3,672,782	571,386	228,082	30,685
Other	1,183,647	587,392	602,407	57,892

Table 4-15 (Continued)

FY 91 REVENUES AND EXPENSES FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	Maricopa LTC	PHS	VHS	Pinal LTC
Expenses (Continued)				
Acute Care	$12,932,118	$ 5,026,186	$3,496,944	$ 715,106
Inpatient Services	2,140,822	894,774	1,357,818	166,620
Medical Compensation	2,883,184	1,032,415	897,730	148,742
Physician - Salary	0	226,035	0	0
Physician - Capitation	0	271,116	577,642	148,742
Physician - Fee-for-Service	2,883,184	535,264	320,088	0
Other Acute Care	7,908,112	3,098,997	1,241,396	399,743
Emergency Services	296,640	90,803	23,483	23,598
Pharmacy	2,596,704	1,070,388	933,161	185,212
Lab/Radiology	444,710	219,282	41,303	29,319
Surgery	50,336	0	14,505	0
Durable Medical Equipment	1,265,907	849,361	179,455	67,220
Other	3,253,815	869,162	49,489	94,394
Other Medical	1,600,345	(278,220)	21,090	4,991
Ventilator Dependent	1,616,651	0	0	4,991
Other	(16,306)	(278,220)	21,090	0
Administration	8,900,451	3,280,911	2,388,395	6,053,642
Net Income	$ 1,605,128	$(2,775,580)	$2,040,171	$ 523,390

Table 4-15 (Continued)

FY 91 REVENUES AND EXPENSES FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	APIPA	CAP	Total
Revenue	$5,381,460	$2,011,737	$218,353,849
Capitation*	5,319,689	1,675,921	179,600,388
Reinsurance	12,000	0	871,208
Patient Contributions (Includes Social Security)	0	304,544	32,890,198
Coordination of Benefits	0	0	0
Case Management. Fee for Ventilator Dependent	0	0	27,799
Fee-for-Service Payments for Ventilator Dependent	0	0	1,614,381
Interest Income	49,771	29,172	3,319,797
Other	0	2,100	30,078
Expenses	4,823,154	1,803,119	216,193,816
Health Care Costs	4,305,016	1,688,429	200,553,839
Institutional Care	3,649,759	1,489,928	167,979,785
SNF	1,934,372	966,110	117,980,374
ICF	1,715,387	523,818	47,913,452
Therapies (not rendered as an inpatient in a hospital)		0	1,183,151
Other	8	0	27,838
HCB Services	109,130	56,746	8,367,612
Home Health	0	56,746	1,248,213
Nurse	0	56,746	799,517
Aide	0		448,696
Therapy	0	8	75,996
Attendant Care	0	0	4,502,935
Other	109,130	0	2,540,468

Table 4-15 (Concluded)

FY 91 REVENUES AND EXPENSES FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	APIPA	CAP	Total
Expenses (Continued)			
Acute Care	$546,127	$141,755	$22,858,236
Inpatient Services	109,513	15,635	4,685,182
Medical Compensation	95,115	46,890	5,104,076
Physician - Salary	17,519	0	243,554
Physician - Capitation	0	28,389	1,025,889
Physician - Fee-for-Service	77,596	18,501	3,834,633
Other Acute Care	341,499	79,230	13,068,977
Emergency Services	7,545	1,553	443,622
Pharmacy	253,924	40,401	5,079,790
Lab/Radiology	3,240	2,338	740,192
Surgery	35,376	0	100,217
Durable Medical Equipment	41,414	17,408	2,420,765
Other	0	17,530	4,284,390
Other Medical	0	0	1,348,206
Ventilator Dependent			1,621,642
Other	8	8	(273,436)
Administration	518,138	114,690	15,639,977
Net Income	$558,306	$208,618	$ 2,160,033

Source: Annual Audited Reports and Quarterly Financial Reports submitted to the AHCCCS Administration by the participating long-term care program contractors.

* Capitation amounts are based on reconciled rates.

Table 4-16

FY 91 REVENUES AND EXPENSES PER MEMBER PER MONTH FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	Maricopa LTC	PHS	VHS	Pinal LTC
Revenue	$2,300.47	$2,189.79	$2,242.57	$2,044.46
Capitation*	1,856.47	1,835.90	1,862.82	1,731.46
Reinsurance	13.32	0.00	3.51	17.98
Patient Contributions (Includes Social Security)	353.74	347.13	350.60	271.98
Coordination of Benefits	0.00	0.00	0.00	0.00
Case Management Fee for Ventilator Dependent	0.41	0.00	0.00	1.55
Fee-for-Service Payments for Ventilator Dependent	28.76	0.00	0.00	0.00
Interest Income	47.31	6.76	25.53	21.49
Other	0.47	0.00	0.11	0.00
Expenses	2,271.88	2,337.78	2,108.65	1,881.77
Health Care Costs	2,113.34	2,162.85	1,951.87	1,745.80
Institutional Care	1,756.65	1,830.80	1,650.59	1,472.89
SNF	1,295.30	1,246.19	1,073.75	1,002.97
ICF	454.30	542.64	576.84	459.31
Therapies (not rendered as an inpatient in a hospital)	7.06	41.96	0.00	0.00
Other	0.00	0.00	0.00	10.61
HCB Services	97.84	78.90	70.34	49.07
Home Health	11.33	13.46	15.33	21.54
Nurse	5.51	12.50	11.14	9.14
Aide	5.82	0.96	4.19	12.40
Therapy	0.00	3.65	0.50	0.00
Attendant Care	65.42	30.47	14.97	9.54
Other	21.08	31.32	39.54	18.00

Table 4-16 (Continued)

FY 91 REVENUES AND EXPENSES PER MEMBER PER MONTH FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	Maricopa LTC	PHS	VHS	Pinal LTC
Expenses (Continued)				
Acute Care	$230.35	$ 267.99	$229.55	$222.29
Inpatient Services	38.13	47.71	89.13	51.79
Medical Compensation	51.36	55.05	58.93	46.24
Physician - Salary	0.00	12.05	0.00	0.00
Physician - Capitation	0.00	14.46	37.92	46.24
Physician - Fee-for-Service	51.36	28.54	21.01	0.00
Other Acute Care	140.86	165.24	81.49	124.26
Emergency Services	5.28	4.84	1.54	7.34
Pharmacy	46.25	57.07	61.26	57.57
Lab/Radiology	7.92	11.69	2.71	9.11
Surgery	0.90	0.00	0.95	0.00
Durable Medical Equipment	22.55	45.29	11.78	20.90
Other	57.96	46.34	3.25	29.34
Other Medical	28.51	(14.83)	1.38	1.55
Ventilator Dependent	28.80	0.00	0.00	1.55
Other	(0.29)	(14.83)	1.38	0.00
Administration	158.54	174.94	156.78	135.96
Net Income	$ 28.59	$(147.99)	$133.92	$162.70

Table 4-16 (Continued)

FY 91 REVENUES AND EXPENSES PER MEMBER PER MONTH FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	APIPA	CAP	Total
Revenue	$1,897.55	$2,273.15	$2,249.49
Capitation*	1,875.77	1,893.70	1,850.25
Reinsurance	4.23	0.00	8.98
Patient Contributions (Includes Social Security)	0.00	344.12	338.84
Coordination of Benefits	0.00	0.00	0.00
Case Management Fee for Ventilator Dependent	0.00	0.00	0.29
Fee-for-Service Payments for Ventilator Dependent	0.00	0.00	16.63
Interest Income	17.55	32.96	34.20
Other	0.00	2.37	0.31
Expenses	1,700.69	2,037.42	2,227.24
Health Care Costs	1,517.99	1,907.83	2,066.12
Institutional Care	1,286.94	1,683.53	1,730.54
SNF	682.08	1,091.65	1,215.44
ICF	604.86	591.88	493.61
Therapies (not rendered as an inpatient in a hospital)	0.00	0.00	12.19
Other	0.00	0.00	0.29
HCB Services	38.48	64.12	86.20
Home Health	0.00	64.12	12.86
Nurse	0.00	64.12	8.24
Aide	0.00	0.00	4.62
Therapy	0.00	0.00	0.78
Attendant Care	0.00	0.00	46.39
Other	38.48	0.00	26.17

Table 4-16 (Concluded)

FY 91 REVENUES AND EXPENSES PER MEMBER PER MONTH FOR EPD LTC CONTRACTORS
(contractors are presented in order of size)

	APIPA	CAP	Total
Expenses (Continued)			
Acute Care	$192.57	$160.18	$235.49
Inpatient Services	38.62	17.67	48.27
Medical Compensation	33.54	52.98	52.58
Physician - Salary	6.18	0.00	2.51
Physician - Capitation	0.00	32.08	10.57
Physician - Fee-for-Service	27.36	20.91	39.50
Other Acute Care	120.42	89.53	134.64
Emergency Services	2.66	1.75	4.57
Pharmacy	89.54	45.65	52.33
Lab/Radiology	1.14	2.64	7.63
Surgery	12.47	0.00	1.03
Durable Medical Equipment	14.60	19.67	24.94
Other	0.00	19.81	44.14
Other Medical	0.00	0.00	13.89
Ventilator Dependent	0.00	0.00	16.71
Other	0.00	0.00	(2.82)
Administration	182.70	129.59	161.12
Net Income	$196.86	$235.73	$ 22.25

Source: Annual Audited Reports and Quarterly Financial Reports submitted to the AHCCCS Administration by the participating long-term care program contractors.

* Capitation amounts are based on reconciled rates.

Table 4-17

LTC EPD CONTRACTOR MEMBER MONTHS FOR FY 91 BY PLACEMENT CATEGORY

	Maricopa LTC	PHS	VHS	Pinal L T C	APIPA	CAP	Total
Skilled Nursing Care	30,614	10,774	7,563	1,771	1,293	506	52,521
Intermediate Care	14,609	4,664	4,908	870	1,121	264	26,436
ICF/MR	0	0	1	0	0	0	1
Home and Community-Based							
Adult Foster Care	735	1,091	59	0	0	0	1,885
Attendant Care	4,698	1,016	0	168	0	0	5,882
Group Home	0	0	0	0	0	0	0
Individual Home	4,537	1,209	2,703	408	422	92	9,371
Unplaced or Deceased	948	0	0	0	0	23	971
Total	56,141	18,755	15,234	3,217	2,836	885	97,068

Source: Annual Audited Reports and Quarterly Financial Reports submitted to the AHCCCS Administration by the participating long-term care program contractors.

VHS

VHS was an organization established specifically to bid on the ALTCS program. VHS was owned by three physicians and was managed originally by Health Management Associates (HMA). HMA provided all administrative services for the plan receiving a percentage of the capitation revenue as a management fee. In the summer of 1992, HMA was terminated, and a new internal management team was developed. The team was led by James Burns, a former HMA manager.

VHS operates primarily on capitation. The capitation revenue received for ALTCS is divided into five revenue centers/risk pools. For FY 91, VHS had total revenues from ALTCS program operations of $34.2 million, or $2,242.57 per member per month. VHS's expenditures for ALTCS were $32.1 million, or $2,108.65 per member per month.

Pinal LTC

FY 91 was the first year of ALTCS program operations for Pinal LTC, which serves Pinal County. Pinal LTC is a county-operated operation. Pinal LTC had revenues of $6.6 million, or $2,044.46 per member per month. Expenditures for Pinal LTC in FY 91 were $6.1 million, or $1,881.77 per member per month.

APIPA

FY 91 was the also first year of ALTCS program operations for APIPA, which serves Yuma County. APIPA was started in 1982 to bid on the first year of the AHCCCS acute care program. APIPA is the largest AHCCCS acute care plan. APIPA had revenues of $5.4 million and expenditures of $4.8 million. On a per member per month basis, APIPA's revenues were $1,897.55 and expenditures were $1,700.69.

CAP

CAP started as an acute care AHCCCS plan in Coconino County and a portion of Yavapai County. CAP bid on ALTCS and was selected as a program contractor in Coconino County. The ALTCS operations run by CAP are relatively small. CAP has less than 100 ALTCS enrollees. A single person on the CAP administrative staff provides most of the required ALTCS functions such as case management, provider relations, contracting, utilization review and quality assurance. Other administrative functions such as data processing, general administration, and financial management and reporting are handled by CAP's acute care plan administrative staff.

For FY 91, the third program year, CAP had revenues from ALTCS operations of $2.0 million and expenses of $1.8 million. On a per member per month basis, CAP's revenues were $2,273.15 and expenses were $2,037.42.

Summary Across Contractors

As shown in Table 4-16, revenue per member per month for ALTCS contractors in FY 91 ranged from a low of $1,897.55 for APIPA to a high of $2,300.47 for Maricopa LTC. Expenses per member per month ranged from a low of $1,700.69 for APIPA to a high of $2,337.78 for PHS. For all contractors combined in FY 91, average revenue and expenses per member per month were $2,249.49 and $2,227.24, respectively.

One contractor, PHS, experienced a financial loss for FY 91. Expenses exceeded revenues by $147.99 per member per month. For the other long-term care contractors, revenues exceeded expenses in FY 91. The income was $28.59 per member per month for Maricopa LTC, $133.92 per member per month for VHS, $162.70 per member per month for Pinal LTC, $196.86 per member per month for APIPA, and $235.73 per member per month for CAP. For all contractors combined in FY 91, the average income was $22.25 per member per month.

Policy Implications

One of the most important considerations in a health care program is the decision about the methodology to be employed to pay for services. A program like AHCCCS must minimize cost, provide incentive to insure efficient provider behavior, promote appropriate access, and encourage the delivery of high quality care. It must also be sufficiently flexible to permit changes over time as the environment in the state changes.

Arizona has made a decision to do this through a system which shares risk with its contractors. Lessons concerning how to share this risk as well as the necessary data systems to support risk sharing are of importance to states considering the implementation of an ALTCS-type program.

ALTCS has prospectively determined rates largely based on actual costs. The FY 93 methodology for the ALTCS capitation rate weights an estimate for institutional costs and for HCB costs by a contractor-specific negotiated mix of clients in institutional and HCB care. Allowances for case management, administration, and other components are added to this number. In bid years, the institutional cost is the average contracted rate for institutional care negotiated by the contractors with their nursing homes, adjusted for patient and third party liabilities and enrollment lags. In renewal years, the institutional cost is the prior year's average nursing home per diem, which is increased for inflation and adjusted for patient and third party liabilities and enrollment lags. The HCB cost is the previous year's HCB cost inflated by the DRI home health index. Other adjustments made in FY 93 for EPD contractors were an additional allowance for supplemental case management and a deduction for interest. Thus, AHCCCS can negotiate with the contractors concerning the amount contractors pay nursing homes and on case management, administration, and other allowances.

ALTCS program contractors include both public and private entities. Contracting with other public programs create unique challenges to a state. In ALTCS, this is especially the case for DES, a sister state agency to AHCCCS, which provides services to MR/DD beneficiaries statewide. DES

operated a state program for MR/DD clients for many years prior to ALTCS and continues to provide services to about the same number of MR/DD clients not eligible for ALTCS as are eligible for ALTCS.

Contracting with a sister state agency brings with it unique management and enforcement issues that can substantially impact the functioning of a reimbursement system. States must carefully consider the implications of this in the design of their programs. Having authority to manage in a managed care system is of substantial importance, and consideration must be given to the relationships that need to be forged to do this effectively.

DES capitation has been the amounts received from HCFA as the federal match for ALTCS-eligible MR/DD beneficiaries. AHCCCS has essentially passed through the federal share for MR/DD eligibles directly to DES. In the beginning of the program, an interim HCFA payment rate was negotiated for MR/DD eligibles. This rate was supposed to be adjusted and a new rate set based on an audit of DES cost data that was to be completed by January 1990. The audit and final reconciliation was not completed until October 1992. Thus, for the first four years of the ALTCS program, payment to DES for MR/DD beneficiaries was based on interim rates. As of January 1993, audits for FY 91 and FY 92 have not been completed.

Data problems have historically existed between DES and AHCCCS concerning not only financial data but also case management and encounter data. This inability on the part of DES to provide program required information raises serious concerns about the desirability of including a contractor without adequate data systems in place. The position of the contractor as a sister state agency made the relationship even more problematic as AHCCCS believed they could not sanction DES unless HCFA withheld a sanction amount from -federal payments.

Data from audits of FY 89 and FY 90 and from unaudited quarterly reports for FY 91 indicate that DES ALTCS revenues exceeded expenses in FY 89 but expenses exceeded revenues in FY 90 and FY 91. Estimates for FY 89 are a 2.5% excess and a 4.1% and 4.3% shortfall in FY 90 and FY 91 respectively. To some

extent this may be due to stable HCFA interim reimbursement rates in the first three years of the program. The FY 89 and FY 90 results include the reconciliation of HCFA reimbursement to actual costs, but the FY 91 data do not include the reconciliation results because the audit had not been completed. DES administrative costs were 26% of revenues in FY 89 and 19% in both FY 90 and FY 91.

ALTCS EPD contractors have been capitated since the beginning of the program and over time the amount of reconciliation of these rates to actual costs has decreased. Reconciliation items that have been dropped by FY 92 are adjustments for Medicare/TPL, patient share of cost, and the cost of therapies. Reconciliation of capitation payments to actual expenditures will still be made if HCB average costs are more than 10% lower than what was budgeted in the capitation rate calculation and if the actual percentage of enrollees who use HCB care is more than 0.5 percentage points greater than the percentage used in the budgeted capitation rate.

In the design of a new reimbursement system, it is important to consider the extent to which it is appropriate for entities to be truly capitated without reconciliation. Over time, the number and extent of reconciliations that are appropriate should decrease as the state and the capitated entities gain more experience with the program and more knowledge of their costs.

Since the beginning of the program, EPD contractors have been subjected to a cap on the numbers of ALTCS eligibles who can be in home and community-based care. As HCFA's confidence with the program's cost effectiveness has grown, it has allowed larger percentages of ALTCS's EPD eligibles in HCB care (18% in FY 91, 25% in FY 92, and 30% in FY 93). DES has no such cap. Over 95% of DES eligibles have been and are maintained in the community.

EPD program contractors initially opposed the cap considering its allowance too low. However, as the cap has increased, contractors have been reluctant to negotiate a capitation payment based on a level of HCB use at the cap. In the FY 92 and FY 93 negotiations, AHCCCS began using the capitation payment methodology to try to increase the numbers of beneficiaries placed in

HCB care. In FY 92, any contractor whose actual HCBS mix exceeded assumed mix by more than 0.5% was allowed to keep the difference between institutional and HCBS capitation for 0.5% of member months. For development of the FY 93 rates, AHCCCS introduced a financial incentive for urban contractors to accept an HCBS mix percentage of at least 25% and rural contractors to accept an HCBS mix percentage of at least 22%. If a contractor accepted this rate or a higher one, then AHCCCS would allow the contractor to enroll additional HCBS users (up to 0.5 percentage points above the assumed HCBS mix in the capitation rate) before capitation payments would be adjusted to reflect the higher HCBS mix. The tactic appeared to be successful as all EPD contractors accepted the target or higher HCBS mix assumptions.

Tactics such as the one described in the paragraph above that encourage the use of HCB care for more costly institutional care may be necessary in ALTCS-type programs. This may be especially true for rural contractors who did not have access to developed provider networks for HCB services. Incentives that reward contractors for expanding HCB care in these areas are likely to result in lower overall program costs, provided that effective screening mechanisms are in place to ensure that eligibles are truly at risk of institutionalization.

Information reported by the ALTCS EPD contractors to AHCCCS concerning their financial performance for the first three years of the program indicates that only one EPD contractor has experienced expenses in excess of revenues. This contractor, PHS, showed losses in program years 8 and 9.

In considering this performance, it must be remembered that the two largest components of the rate, the amounts used for institutional and HCB care per month are based on averages that should be very close to actuals. The nursing home average daily rate used is the average contracted rate for nursing homes. The HCB care rate used is the actual HCBS cost in the previous year. In addition, the actual mix of institutional and HCBS users were not very different than the assumed mix and the actual administrative costs were lower than those budgeted (see Chapter 6).

The dangers of capitating providers in an ALTCS-type system include setting the rate too low so that participants cannot cover their reasonable costs; setting the rates inequitably among contractors so that some contractors experience losses while others have windfall profits; and setting the rates too high so that contractors have no incentives to control costs, no incentives to report data, and the program experiences excess costs.

Whether providers are receiving appropriate reimbursement is of special concern in situations where many of the contractors are other public sector entities. Private contractors have options to withdraw from the process if they believe that the venture is not profitable. Public providers, especially those who are legislated to participate, have no such option. If they are not able to live within their reasonable costs, the additional resources will still be the responsibility of the electorate.

The AHCCCS methodology for ALTCS capitation attempted to take these issues into consideration. AHCCCS developed a method where a large percentage of the rate was based on actual costs and so the risk placed on the contractors was confined to areas where they theoretically had more control: case management and administration. They also, at least in the beginning of the program, expended effort attempting to directly control the major cost component, the nursing home institutional rate negotiated by the contractor.

In designing a capitation methodology for Medicaid long-term care, significant attention should be given to equity, flexibility, appropriate sharing of risk, and enhancing program cost containment features. Balancing these considerations is difficult, but can be informed by the ALTCS experiences.

5. PAS, LEVEL OF CARE DETERMINATION, AND THE USE OF HCB SERVICES

Introduction

In keeping with the overall mentally retarded/developmentally disabled (MR/DD) focus of this year's report, this chapter concentrates on the MR/DD program's approach to preadmission screening (PAS), level of care determination, and the cost-effectiveness of its home and community based services. Because there is only one program contractor for the MR/DD population, the Department of Economic Security (DES), there is no need to make comparisons between contractors. Nor is there a need to discuss effects of the cap on home and community-based (HCB) services imposed by the Health Care Financing Administration (HCFA), because there is no cap for this population. For these reasons, the usual two chapters on PAS, level of care, and use of services are combined into one.

Data sources used in this report include:

- an initial site visit to the Arizona Health Care Cost Containment System Administration (AHCCCSA), DES, and several MR/DD placement settings during October 1992;
- follow-up telephone calls;
- documents provided by AHCCCSA;
- client eligibility and tracking data [subsets of the Long-Term Care Eligibility Determination Subsystem (LEDS) and the Client Assessment and Tracking System (CATS)] provided on tape and disk by AHCCCSA;
- DES client roster information;
- characteristics of the national intermediate care facility for the mentally retarded (ICF/MR) and non-JCF/MR MR/DD population from the 1987 National Medical Expenditure Survey's (NMES's) institutional surveys (used to model risk of institutionalization); and

- a second site visit in January 1993 to a wide variety of MR/DD day treatment and residential settings and DES central office to gather additional information on level of care determination and case mix.

Major issues discussed are: the Arizona philosophy of non-institutionalization, the placement continuum available to MR/DD clients, client characteristics, case mix and the blended rate payment system, and our estimates of the program's cost effectiveness. Other issues (the MR/DD PAS and supply of HCB services) are also discussed in the chapter.

Major Evaluation Issues and Findings

Our research suggests that Arizona's ability to serve 97% of its MR/DD population in non-ICF/MR settings is attributable to state deinstitutionalization policy that preceded AHCCCS and the Arizona Long-Term Care System (ALTCS) and has not been compromised by program implementation. How DES implements its deinstitutionalization policy through the placement process is briefly described based upon staff descriptions of the process.

A new "blended rate" case mix adjusted payment rate was developed and implemented by DES on October 1, 1992. This payment methodology pays a different rate to each provider, but the rate is uniform across all the provider's settings of a given service type regardless of clients' disability. Essentially, providers are placed at risk for meeting client needs at a fixed per capita payment rate. The rate reflects acuity mix as of the baseline year (1991) and will be adjusted annually. Such a system has implications for level of care determination and placement, which are discussed below.

Finally, comparative analysis shows that clients served in HCBS settings come from a population that in many other states would likely be served in ICF/MR settings. Although some HCBS clients appear to be at low risk of institutionalization, the majority of clients appear to be using HCB services as a substitute for ICF/MR placement. Hence the program is cost-effective. Risk model development and results and the cost-effectiveness equation employed in the analysis are described in detail.

The Arizona Philosophy of Non-Institutionalization

Between 1952 and 1973, Arizona opened and operated three institutions for the population now generally referred to as MR/DD. These settings were:

- the Arizona Children's Colony (now the Arizona Training Program at Coolidge), which opened in 1952 with a capacity of 350; by 1969, its population had grown to 1,200;
- the Arizona Training Program at Tucson established in 1969; and,
- the Arizona Training Program at Phoenix, opened in 1973.

The latter two facilities were opened to meet the demand that was overflowing from the Coolidge facility.

Parental demands for improved, less restrictive care sparked a 1976 joint legislative committee review of service delivery, press investigations, and a lawsuit filed by a parents advocacy group. The suit cited poor physical structure, high staff ratios, and lack of adequate habilitation programs at the Coolidge facility. These developments resulted in a long range plan to deinstitutionalize the MR/DD population, close the Coolidge facility, and develop a system of community programs. Deinstitutionalization efforts continued, and in 1988, the Arizona Training Program at Phoenix, which had between 86 and 96 patients, was closed. While four community ICF/MRs were created to take its place, their combined population totals only 46. The Tucson facility was depopulated from approximately 200 patients to 40 today. The Coolidge population has shrunk to 140 patients and continues to be a target for closure. Family opposition to its closure has kept it open. However, it has made no new admissions since 1988, when ALTCS went into effect, and made only a handful in the several years before.

All of these facilities are state-owned. Title 36, Section 2939 B1. of the Arizona Revised Statutes states that an ICF/MR, "shall meet all federally . . approved standards and may only include the Arizona training program facilities, a state owned and operated service center, state owned or operated

community residential settings or existing licensed facilities operated by this state or under contract with the department (DES) on or before July 1, 1988." This legislation limits the construction of new beds, further promoting community placement.

On December 19, 1988, ALTCS was implemented for MR/DD persons. Eleven ICF/MRs are certified under the state plan for a total of 251 Medicaid beds. These include separate cottages at Coolidge, serving clients now covered under ALTCS but all of whom were admitted before the program began.

In short, it appears that the state has legislated a philosophy of deinstitutionalization and has adhered to that mandate for more than 15 years. Policies and practices adopted by ALTCS appear to be an extension of this pre-ALTCS policy. As reported earlier, DES did not want to include ICF/MRs as part of the demonstration waiver request. However, because the arrangement with HCFA stipulates that HCB services must be a substitute for institutional care, Arizona was forced to certify ICF/MR beds to ensure that institutionalization was a placement option.

DES staff report that the primary change under ALTCS is the infusion of money into the department. As reported in the First Implementation and Operation Report,[12] prior to ALTCS, services were funded entirely by the state. If funds were not available, clients were put on waiting lists. A services review committee evaluated the financial feasibility of providing services and prioritized which clients should receive services first. Since ALTCS, the Department is no longer as resource driven, at least when it comes to Title XIX clients. More state funds can now be directed to non-Title XIX persons.

The Placement Continuum

The notion of placement criteria for MR/DD is a bit of a misnomer. While for the EPD population case managers select between nursing facility and HCBS settings, MR/DD clients use a variety of residential and nonresidential

services. Residential settings include group homes, adult development homes, and family homes in addition to ICF/MRs and other institutions. Clients residing in any type of setting, including an ICF/MR, are likely to be receiving HCB day treatment services. Hence it is more relevant to think in terms of the variety of services used by an MR/DD client.

DES administrators and case managers described the residential and day treatment service selection process and available long-term care settings and members of the project team visited a number of settings on two occasions.

DES staff first try to keep the client in the family home by providing supports, typically including renovations, equipment, respite, and in-home habilitation. In a typical example, parents who have cared for their child since birth have difficulty as both they and the child age. For example, they can no longer lift the adult child into and out of the bathtub. For the child to remain at home, the parents require assistance and DES may provide a hoyer lift.

If a family will not accept any alternative but out-of-home placement, the family and DES may choose from a hierarchy of settings. Below we describe the non-ICF/MR settings and the ICF/MRs available.

Non-ICF/MR Settings

With rare exception, children are placed with a foster family. Few children reside in group homes. The foster family tends to the client's basic needs (e.g., meals, supervision) while DES adds other assistance such as nursing. When a child is in foster care, DES plans for two eventualities: 1) the child will return to his/her family, or 2) the child will be put up for adoption. Therefore, DES places expectations upon the child's family -- for example, that they will visit on weekends. Although DES cannot force adjudication under ALTCS, whereby the court intervenes to remove a child from his or her family (as it could in the pre-ALTCS period), it can claim abandonment if the parents do not see the child for a year.

Adult clients may be placed in a group home, an adult foster care home, an adult development home, or with a professional family. The latter three are family settings. Group homes are residences for three to six clients and are usually staffed around-the-clock by paraprofessionals.

If the case manager and family believe that the client would be uncomfortable living with a number of other people, they may choose the family setting. On the other hand, if they think the client would benefit from peer interaction, they may choose the group home.

An adult development home provides room and board, personal care, habilitation, and supervision for one to three adults in a family environment. Professional families provide more care than foster parents and usually have specific training. Professional families typically care for clients who may awaken in the middle of the night or who have been aggressive toward family members in a foster care situation. A typical client living in a home with a couple will attend a day treatment program where he/she works on socialization skills, such as lengthening his/her attention span or proper grooming.

Placement in a group home is typical for clients with difficult behavior. Placement in three-, four-, five-, or six-person homes is based upon family wishes, case manager suggestions, and client's level of functioning. Smaller homes offer more individualized activities. The day program may also be a factor. A three-person home may offer a more challenging vocational program and clients probably need less assistance with independent living skills. A four- to five-person home would have a number of staff to assist with self-help skills. A typical client residing in a group home attends day treatment where he/she learns social behaviors (e.g., by going shopping or volunteering at a nursing home) and does arts and crafts. Other services available to clients in group homes are personal care, habilitation, health aide, home health nurse, durable medical equipment, medical supplies, transportation, day care and respite. Personal care includes maintenance of personal hygiene and activity of daily living (ADL) performance. Habilitation includes physical, occupational, and speech

training, training in independent living, sensory motor development, and behavior interventions.

Before placement in a group home, a client must tour the home to see if the other clients would be compatible. Safety is a paramount concern. Clients who do not defend themselves cannot be placed in a home with aggressive people.

DES contracts with between 400 and 500 group homes. The homes average four to five clients. These homes must be licensed to receive Medicaid certification. While Arizona's Department of Health Services has statutory authority to license group homes, it has delegated the responsibility to DES.

ICF/MRs

Very few clients are placed in ICF/MRs. As of October 1992, DES served 208 ALTCS clients in ICF/MRs, while they served 5,808 in group homes, adult development homes, and family homes. Most of the 208 ICF/MR residents were in residence when ALTCS began and in most cases remain institutionalized at family insistence.

DES staff estimate that there have been perhaps ten ICF/MR admissions since ALTCS began, usually because the client was a child with very heavy medical services needs. When such a placement does occur, agency staff say they immediately begin a process they hope will eventually lead to placement in a setting less restrictive than an ICF/MR. ICF/MR facilities visited by the site visit team are briefly described in Appendix B.

A small number of clients reside in nursing facilities. DES staff expect Preadmission Screening and Annual Resident Review (PASARR) requirements to continue to reduce the numbers. Federal law mandated that all Title XIX clients entering nursing homes after October 1, 1989 be screened for mental retardation. All residents had to be screened by April 1, 1990. According to the law, those persons found mentally retarded or mentally ill must be placed

appropriately based on need for nursing services and active treatment. Before PASARR, about 100 DES clients resided in nursing facilities; as of October 1992, the number was down to 42. Some residents may remain in the facility due to lack of other appropriate placement, family decision, or because they had resided there for more than 30 months (the law allows continuation of their stay in that circumstance). Some DES clients are served for 30, 60, or 90 days by Brian's Care, which is a nursing facility that provides skilled nursing care to medically involved children. This facility is similar to Hacienda de Los Angeles, an ICF/MR (see Appendix B), in that it has a relationship with various hospitals and cares for medically involved post-discharge clients.

Client Characteristics

Table 5-1 compares characteristics of ALTCS MR/DD clients by selected residential setting: ICF/MR, group home, foster home, and family home. The group home category includes clients residing in group homes and adult development homes. The foster home category is composed of children residing with foster families and adults residing in an adult foster care home or with a professional family. Individuals in the family home category live in their family homes and receive HCB services.

ICF/MRs have the greatest percentage of profoundly and severely mentally retarded residents. Foster homes have the second most severe population, although the small sample precludes us from making generalizations. Family homes have the greatest percentage of clients characterized as retarded-other. The likely explanation is that these are children whose level of retardation has not yet been determined. That less than half the clients in family homes are adults seems to bear this out.

Few of the clients are autistic, but a third to half, across all settings, are epileptic and about a fifth have cerebral palsy. Clearly, the ICF/MR residents are most dependent in ADLs, but all of the settings appear to serve a dependent population.

Table 5-1

COMPARISON OF ALTCS MR/DD CLIENTS* FOR SELECT RESIDENTIAL SETTINGS BY DISABILITY AND OTHER CHARACTERISTICS

	ICF/MR N=68	Group Home N=468	foster Home N=7	Family Home N=4154
Distribution of Severity of MR**				
Profound	47	22	42	10
Severe	26	30	14	17
Mild		13	14	16
Moderate	2:	31	28	27
Borderline	0	1	0	3
Other	1	3	0	27
Percent with				
Autism	4	4	0	5
Cerebral Palsy	31	18	57	22
Epilepsy	46	27	29	34
Incontinency	62	50	71	41
ADL Dependencies				
Bathing	100	86	300	89
Dressing	97	83	100	83
Toileting	90	57	86	62
Feeding	87	55	29	65
Walking	61	28	43	36
Bedfast	52	23	43	33
Percent				
Blind	6	6	14	9
White	74	72	71	67
Adult	96	92	86	47
Male	57	61	29	56

Source: Combined Arizona data set created from AHCCCS LEDS and CATS data, 10/88 to 2/92; DES placement data, 12/88 to 1/93; and DES degree of retardation data, 9/92. Includes only those 4,776 individuals matched on all three files.

* Excludes 79 individuals with missing data.

** Numbers may not appear to add to 100% due to rounding.

Another indication of the clients' disability are their Clients' Inventory for Client and Agency Planning (ICAP) scores. The ICAP assesses adaptive functioning and service needs for clients and rates clients on a scale from 0 (most dependant) to 100 (least dependant). The ICAP is used in care planning. A score of 0 to 35 reflects the need for total or extensive personal care and supervision. Forty-seven percent of all clients enrolled with DES as of October 1992 had ICAP scores between 0 and 35. Thirty-nine percent had scores between 36 and 69, and ten percent had scores between 70 and 100. (The scores for approximately four percent were unknown). The most severely disabled clients made up the largest percentage of clients in three selected settings -- close to half of all clients receiving HCB services in family settings and group homes/adult development homes and three-quarters of clients in ICF/MRs. Those in the medium functioning range (36 to 69) made up another 40% of the clients in the community settings and a quarter of ICF/MR clients. None of the clients in an ICF/MR as of October 1992 had a high (70 to 100) ICAP score, while about ten percent of clients in other settings had scores indicating this high level of functioning.

These figures and limited on-site observation suggest that ALTCS generally serves a highly dependent population and tries to adhere to a placement process that matches capability of the setting to client needs. Exceptions occur, according to staff, only when an ideal slot is not available, or.when a family member with a keen understanding of the agency's rules requiring family approval of placements demands a placement that staff feel is acceptable but not ideal.

Case Mix and the Blended Rate Payment System

A prospective payment system for approximately 34 large DES providers (those with DES contracts that exceed $700,000 per year), which was instituted October 1, 1992, may have some implications for case mix and level of care determination. Each provider is paid a blended rate for all of its DES clients across the provider's settings of a given service type regardless of

individual client disability. Previously, payment reflected actual level of need. Separate rate negotiations were held with each provider.

In some cases, placements appeared to have been made into expensive settings that seemed to have staffing capabilities that exceeded individual client and case mix needs. For example, a setting that served medically challenged clients last year when rates were negotiated now serves clients who do not all appear to be medically challenged. However, DES officials explained that the rules for the blended rate system require that a provider accept all DES referrals. If a provider refuses, DES will stop paying for authorized vacancies (e.g, when a client leaves for two weeks to visit family.) This threat had been invoked twice by early January 1993.

There did not appear to be a management and review system in place designed to assure that placements are efficient in terms of matching client needs to capabilities of the setting. In an effort by DES to give case managers more discretion, case managers have recently been empowered to make placement decisions. However, their decisions are not systematically reviewed, and there does not appear to be a system in place for countering a problem that seems to be built into the placement process. That is, providers will object when they are offered a heavy care client, but will not object when offered a client with needs below their staffing capabilities. Over time, this may result in providers serving a case mix lighter than the historical average case mix upon which their rates were set.

A DES working group has been established to develop a standardized approach to case management placement, but it had not yet developed policy by the time of the site visit in January 1993.

DES financial staff acknowledged that there is no on-going monitoring of case mix change at the present time. Providers who are able to reshape their case mix might under some circumstances be able to reduce staff or salaries and improve profits or, in nonprofits, income in excess of expenses. Several constraints limit providers' ability to alter their own case mix, however. Clients typically have long lengths of stay, limiting turnover. Preadmission

screening should limit the number of minimally-challenged clients in the system, and providers who refuse'highly-challenged, or heavy care, clients may be denied payment for authorized vacancies. With respect to provider refusals of referrals, there were indications that field staff may not be aware of the need to report provider admission refusals to financial staff so that they can detect a pattern of deliberate efforts by a provider to avoid a highly-challenged case mix. Problems placing highly-challenged clients were reported by DES staff. Staff reported queuing problems only for therapies, however, not for admission to day treatment or residential services.

Some ALTCS clients supported in semi-independent apartments appeared to manifest such low need that their risk of ICF/MR placement appears to approach zero. On the other hand, providers reported falling demand (i.e., a smaller number of applicants) for services by minimally-challenged clients compared to the early ALTCS period. One explanation offered was that under the new blended rate system, providers face an incentive to hold onto their minimally-challenged clients rather than transitioning them to less restrictive settings. A rival explanation would be that tightened eligibility criteria have reduced the number of minimally-challenged eligibles.

Two overall checks on case mix change are planned. Provider case mix will be compared between 1991 and 1992 by DES in anticipation of rate negotiations next year; In addition, site level reviews of client records do take place. To the extent that case mix gaming does develop, it is also likely that DES staff will develop mechanisms to counteract it.

Cost-Effectiveness

While home care programs for the elderly have not proven to be cost-effective in much of the early research,[13] little research on the cost-effectiveness of home care has been targeted at the MR/DD population.[14] Among the elderly, home care tends to increase overall costs of long-term care rather than reduce costs because only a minority of home care users are actually at risk of institutionalization. To be cost-effective, home care

programs should use screening criteria that identify clients at high risk of institutionalization. If the criteria are not stringent enough, individuals who are not truly at risk of institutionalization (false positives for high risk) will be allowed into the program. The more false positives treated, the less cost-effective the program will be.

AHCCCS contends that it will not spend more with an HCBS program than it would have spent without it. Because Arizona implemented the HCBS program statewide, there is no control group to use for comparison. Therefore, to determine whether the program is cost-effective required an estimation of what costs would have been in the program's absence.

Figure 5-1 presents the components of the cost-effectiveness formula for a budget neutral program. The left side of the equation sums the actual cost of providing ICF/MR and HCB care to the MR/DD population. The right side sums the expected cost of institutional care for current HCBS recipients predicted to be in an ICF/MR if HCB services were not available and for individuals already receiving ICF/MR services. To be cost-effective, the left side must be less than or equal to the right side.

Although the left side can be calculated using actual enrollment and costs, the right side must be estimated. To determine how many of the current clients served in HCB care would have been institutionalized if home care were not available, we had to calculate each person's risk of institutionalization. Individual risk scores were calculated using the coefficients produced from a logistic regression risk model.

The risk model was developed on the NMES (Institutional Population Component and Facility Questionnaire) adjusted for population characteristics. Potential predictors of institutionalization to be included in the model were identified from the relevant literature on the MR/DD population. After choosing a set of potential determinants of ICF/MR residence, AHCCCS client eligibility and placement data and the NMES were compared to determine which variables were available on both data sets. The comparison resulted in a

Figure 5-1

COST-EFFECTIVENESS EQUATION FOR HOME AND
COMMUNITY-BASED SERVICES PROVIDED
TO THE ALTCS MR/DD POPULATION

$$HCBS \times MC\ H + ICF/MR \times MC\ I \leq (Pi)HCBS \times MC\ I + ICFIMR \times MC\_I$$

HCBS = Number of clients receiving HCB services
MC_H = Monthly cost of HCB services
ICF/MR = Number of clients in ICF/MRs
MC_I = Monthly cost of ICF/MR services
(Pi)HCBS = Number of HCBS recipients whose risk score indicates ICF/MR residence

reduced set of variables that could be manipulated on both data sets to create a single variable common to both and consistent with the literature.

The coefficients from the risk model were then applied to each AHCCCS MR/DD client and individual risk scores calculated. These risk scores, as well as the known cost of institutionalization, were plugged into the right side of the cost-effectiveness equation for comparison to the actual costs calculated on the left side.

Literature Review

Although the body of literature dealing with the MR/DD population is quite large, there is only a small portion dedicated to predictors of residence type. Several of the studies used multivariate techniques to determine the relationship between individual and family characteristics and out-of-home placement (including institutions).

The major categories of characteristics examined include age, handicaps and physical disabilities, dependency in ADLs, dependency in instrumental activities of daily living (IADLs), maladaptive behavior, medical conditions, degree of retardation, ethnicity, gender and family income.

Of the studies examining age as a predictor (average age studied was 30 with a range from childhood through 90) all but *one* found increasing age associated with an increased risk of institutionalization or other out-of-home placement.[15] The one study that found an opposite relationship was conducted during the early 1970s and used data from the late 1960s,[16] while the rest of the studies were conducted during the 1980s. This time difference could very well explain the discrepancy in age, due to the change in social and medical attitudes now decidedly against institutionalization of mentally retarded children.

Degree of retardation was consistently found to be associated with greater likelihood of institutional residence,[17] as were severity of medical conditions,[18] handicaps and other physical disabilities" and maladaptive behavior such as aggression and self-injurious behavior.*' Degree of retardation is based upon IQ level with the following classification: mild retardation within IQ range 50-70, moderate retardation within IQ range 35-49, severe retardation within IQ range 20-34 and profound retardation with IQ scores below 20.[21]

Other findings show ADL and IADL dependency to be positively associated with residence in an institution or non-community setting.[22]

Minority background was negatively associated with out-of-home placement.[23] Eyman suggested that minorities are less likely to go into institutions due to their lower income status (higher income is positively associated with institutionalization). Gender was found nonsignificant in all studies except one where females were more likely to be institutionalized than males.[24] The authors, however, were suspicious of the finding because of the small sample size.

Rousey, Hanneman and Blacher[25] examined the differences in risk of institutionalization and personal characteristics between severely and profoundly retarded children. They found that characteristics predicting risk of institutionalization differed by degree of retardation and that age and level of retardation interacted due to more profoundly retarded children being placed earlier in life than severely retarded children.

With regard to age, the risk of institutionalization is greater for the profoundly retarded at each age than it is for the severely retarded. Risk increases for the severely retarded with age and increasing maladaptive behavior. Risk for the profoundly retarded, however, increases with a lack of adaptive behavior abilities such as ambulation, self-toileting, feeding and speech.

Maladaptive behavior also differed by level of retardation. Among all levels of retarded children, the institutionalized population had more maladaptive behavior problems. However, among the profoundly retarded, those residing in the community had more deviant behavior, while among the severely retarded, the institutionalized had more maladaptive behaviors.

The consistency across studies indicated that a group of variables has been identified with explanatory power in distinguishing between institutionalized and community residents. These include: age, medical and handicapping conditions, maladaptive behavior, ADL dependencies, IADL dependencies, degree of retardation and ethnicity. These variables became the focus of the analysis that began with efforts to find comparable measures on national and Arizona data sets.

Data Sources

National Medical Expenditure Survey - 1987

The 1987 NMES was chosen as the national data set on which the risk of institutionalization model would be developed because it is the most recent national data representative of mentally retarded persons and the facilities that serve them. The survey, covering the period from January 1, 1987 to December 31, 1987, includes two components: the Institutional Population Component[26] and the Facility Questionnaire.[27]

The Institutional Population Component sample was chosen using a stratified three-stage probability design. Nursing homes and facilities for the mentally retarded (including state institutions, group homes, foster homes and semi-independent settings) were selected during the first two stages with the resident population selected from these in the final stage.[28]

The Institutional Population Component survey collected data in five areas: 1) residence history prior to admission to the sampled facility; 2) demographics and family composition; 3) health and functional status (ADLs,

IADLS, equipment needs, etc.); 4) medical conditions; and 5) employment and training.

The Facility Questionnaire includes both nursing homes and facilities for the mentally retarded (e.g., ICF/MRs, group homes). Data were collected regarding ownership, size, population served, services provided, licensing and accreditation, admissions and discharges and sources of revenue.

In performing our analysis, we adjusted the Institutional Population Component to represent the Arizona population under study. According to DES, the MR/DD population consists of people with mental retardation, cerebral palsy, epilepsy or autism. Therefore, only those people with at least one of the four diagnoses who resided in a facility for the mentally retarded were kept on the institutional component of the NMES data set.

The Arizona population of interest is limited to Medicaid eligibles. However, the Agency for Health Care Policy and Research (AHCPR), which conducted the NMES, has not yet made insurance information available for the Institutional Population Component. According to AHCPR, more than 50% of the facilities on the NMES file receive Medicaid funding and approximately 42% of the individuals receive supplemental security income (SSI), a good proxy for Medicaid eligibility.[29] Because there is no way to identify Medicaid-eligible residents on the national data set, the model was developed on all individuals meeting the MR/DD criteria without consideration of insurance status. This inability to identify Medicaid eligibles is unfortunate. However, there is not alternative because no Medicaid indicator is available on the file and no effective proxy could be identified.

Cross-tabulations of mental retardation with place of residence (nursing home versus facility for the mentally retarded) indicated that some mentally retarded reside in nursing homes. Because the evaluation is focusing on HCB care as a substitute for institutionalization in an ICF/MR, nursing homes and their residents were excluded from our analyses.

The final data set consists of all individuals residing in a facility for the mentally retarded who are either mentally retarded or have cerebral palsy, epilepsy or autism. No other exclusions were made.

Arizona Data Sources

Three separate data sets were used to create a single file representing 4,776 ALTCS-eligible DES clients between December 1988 and February 1992. DES clients not included in all three files are not included in the final DES data set. Table 5-2 summarizes the data sources, the time periods covered and the number of individuals represented.

The AHCCCS client tracking systems files, LEDS and CATS, contain information on demographic characteristics (e.g., age, sex, ethnicity), medical diagnosis (e.g., illnesses, autism, epilepsy, hearing/sight deficits), ADLS (e.g., toileting, bathing, feeding), incontinence, IADLs (e.g., ability to use a phone, handle money) and behavioral problems. This data covered all AHCCCS enrollees up to February 1992 and was created as a special file for the evaluators in August 1992.

In addition, DES provided two data files. The first file contained information on degree of retardation and represented DES clients as of September 22, 1992, the date the file was created. The second file had placement information for all clients since ALTCS began operations in December 1988. This file contained multiple observations for clients who had changed placements between December 1988 and January 1993, the time period covered by the file. To limit the data set to one observation per client, only the first observation for each AHCCCS identification number was included.

A single file was created by matching individuals across the three data sets by their unique AHCCCS identification numbers. Because the model

required data from all three data sets, the final data set included only those 4,776 individuals who appeared on all three.

Comparability of the Data Sets

Because the risk model was to be developed on the NMES data and then applied to the Arizona population, the NMES and Arizona data sets had to have comparable data for the variables included in the risk model. To ensure that the model included only variables common to both data sets, a detailed comparison of the data sets was performed.

Using the variable categories identified in the literature review as potential determinants of ICF/MR residence, the NMES and the Arizona data sets were reviewed to identify all variables that might possibly fall under one of these categories. The two lists of variables were then matched to determine which were available on both data sets. For variables appearing on both data sets, the exact coding of both variables was examined to determine comparability with regard to variable definition and time period covered by the variable (for example, variables for behavior problems might focus on problems within the past 30 days or any history of the problem).

The NMES and combined Arizona data set provided comparable data for all of the categories of variables identified in the literature review.

Variables not specifically addressed by the literature were also included in the model based upon theoretical considerations. DES uses seven functional criteria in making placement decisions for the MR/DD population. This data was available to us and as many of these criteria as possible were included in the model. The seven criteria are: 1) self-care, 2) receptive and expressive language, 3) learning, 4) mobility, 5) self-direction, 6) capacity for independent living, and 7) economic self-sufficiency. Of those seven, five were available on the NMES. Only learning and economic self-sufficiency were unavailable. The national survey collected information pertaining to employment and income for institutionalized clients, but this

data has not yet been edited and made available for public use. Incontinence and equipment needs such as wheelchairs and walkers were also added because the project team thought they might be important.

In addition to the predictors of institutionalization described in the literature, it became apparent during site visit discussions with DES staff that medical devices were also important characteristics in determining placement. Therefore, an attempt was made to find comparable data for medical devices on the NMES and Arizona data sets. Several variables providing detailed information on medical devices were identified on the AHCCCS LEDS and CATS data files. Unfortunately, similar variables were not available on the NMES. The lack of matching data on the NMES excluded medical devices as a potential variable in the model. This omitted variable is likely to denigrate the fit of the model and diminish its discriminatory power. However, past experience with similar models suggests that the magnitude of these effects is likely to be small. This is because models such as the one presented here, which are robust, include several highly significant variables such as dependency, behavior or mental impairment, and demographic variables that tend to explain most of the nonrandom variation in placement with the few most important variables. Hence, although measures of medical devices would be desirable, their omission from the model is unlikely to change cost-effectiveness results from what they would have been had the variables been included.

Constructing the Cost-Effectiveness Equation

The essence of the cost-effectiveness methodology involves three steps:

(1) Obtaining regression-adjusted coefficients for patient covariates associated with being in an ICF/MR versus being elsewhere. The purpose is to obtain a model for estimating clients' risk of ICF/MR residence;

(2) Algebraically multiplying these coefficients times the values manifested by the ALTCS HCBS population for the same covariates. The purpose is to estimate the risk or likelihood that these clients

would reside in an ICF/MR in the absence of waivered HCB services; and

(3) Multiplying.these estimates of HCBS clients' risk of ICF/MR residence by the monthly cost of an ICF/MR and the client's expected length of stay in that setting if they had been placed there. This cost is then compared to the actual cost of HCB services used by the same clients to see if the waivered services cost less than these clients would have spent in an ICF/MR.

The following sections detail each of the three steps.

Model Specification and Results

The logistic regression model to predict individual risk of ICF/MR residence required two data components. The first component was the variable to be predicted or the dependent variable, which, in this case, is ICF/MR residence versus non-ICF/MR residence. The non-ICF/MR group includes both those in other institutions and those in the community. The second component consists of the independent or predictor variables; which are the variables believed to help predict the dependent variable.

Dependent Variable

The national data set did not identify facilities as ICF/MRs. Therefore, it was necessary to choose criteria that would identify facilities matching the Arizona definition of an ICF/MR.

Two options for defining a facility as an ICF/MR were considered initially. One option was to define a facility as an ICF/MR if 100% of its beds were certified as ICF/MR. The second option was to define an ICF/MR as a facility providing nursing care, having 24-hour supervision, admitting only clients diagnosed as MR, having case management; being licensed by the Department of Health and meeting Code of Federal Regulations #42.

After proposing the two definitions to DES staff, a third alternative was identified. It was decided to define facilities on the national data set as ICF/MR if they have some ICF/MR certified beds and are licensed by any agency. Because ICF/MRs are defined differently in each state, it was agreed that this definition would best identify ICF/MRs nationwide most similar to ICF/MRs in Arizona. This definition identifies particular institutions as ICF/MRs and categorizes all other institutions and community residences as non-ICF/MRs.

Independent Variables

Variables tested for inclusion in the model included those which existed on both the national and AHCCCS data sets and which were suggested to be important indicators of ICF/MR residence by the literature review and/or discussions with DES staff.

Variables tested for inclusion in the model were demographics (age, gender, and race), degree of retardation, ADL dependencies, IADL dependencies, speech impairment, maladaptive behavior, medical conditions, handicaps, and equipment.

Demoqraohics

Age, as of December 31, 1987 (the conclusion date of the NMES data collection) is included as the model as a continuous variable ranging from zero to 99. In addition, the model includes a dichotomous variable classifying adults (16 years or older) as "1" with the reference group consisting of children (i.e., those 15 years old and younger).

To test if the relationship between age and the dependent variable was linear, the proportion of individuals residing in an ICF/MR was examined for each five-year age interval. While a plot of age category by ICF/MR residence indicated that age was not perfectly linear, a particular non-linear pattern

was not discernible. The plot did, however, suggest that the proportion institutionalized "jumped" when the individuals became adults. Therefore we included the dichotomous age variable in our model. As an additional test of linearity, a variable for age squared was included in the model and found to be nonsignificant. Thus, while not perfectly linear, there was not sufficient evidence to reject the linearity assumption.

Ethnicity was specified as a dichotomous variable, coded "1" if white and "0" if non-white. A more detailed race variable was not considered because fewer than three percent of individuals on the national data set represented racial backgrounds other than white or black. Unfortunately, the national data set did not identify hispanics, the second most prevalent ethnic group in Arizona.

Gender, specified as a dichotomous variable, was also included in the model. Gender was coded as "1" for males and "0" for females.

Degree of Retardation

The literature indicated that severity of retardation was an important indicator of living arrangement. Therefore, a series of dummy variables was tested for each level of retardation. On the national data set, if the individual was identified as retarded, the actual degree of retardation was labeled as borderline, mild, moderate, severe, profound or other. The other group consisted of individuals who were determined to be retarded, but for whom a specific level was undetermined. -Dummy variables for each of the levels were constructed. A single multilevel variable was not used because there was no reason to assume that the risk of placement in an ICF/MR was linearly associated with degree of retardation. All levels were tested using borderline, the lowest level of retardation, as the reference group. The dummy variables for mild and moderate, the next two levels of retardation, were dropped from the final model because the risk for these groups was no different from the risk of the excluded group.- Only the profound, severe and

other groups differed significantly from the borderline group and were kept in the final model.

For the Arizona data set, DES data were used to create the degree of retardation dummy variables. All of the categories were comparable on the national data set, except for the DES level identified as "normal range." During one of the site visits, it was concluded that the IQ levels within the "normal range" were equivalent to the "borderline" group on the national data set.

ADL Deoendency

Dichotomous variables were created for each of the six activities of daily living (bathing, dressing, toileting, continence, transferring, and eating). On the national data set, bathing and dressing were coded as "1" if the individual had difficulty and required help or supervision, or was in a coma (only one person was in a coma). Toileting, eating and transferring were coded as "1" if the person had difficulty and required help or supervision, or could not perform the activity at all.

On the Arizona data set, bathing, dressing, toileting, transferring and eating were coded as "1" if the person required minimal (occasional or frequent "cuing"/supervision), moderate (step by step "cuing" or hands-on help) or maximum (totally dependent or unwilling to assist) assistance. Cuing, as used in the Arizona definition, refers to the use of verbal prompts to guide an individual through an activity.

On both the national and Arizona data sets, individuals were coded as "1" for incontinence if they were incontinent weekly or more, or if they had a bowel or bladder device.

A dummy variable indicating the presence of five or more ADL dependencies was created to capture the effect of total ADL dependency. To exclude minor, infrequent incontinence with no dependency implications,

incontinence was not counted unless the individual was dependent in at least one other ADL.

Constructing the ADL score revealed that 395 ALTCS clients had missing values for these measures. Analysis showed that 351 of these individuals were children under age six, for whom ALTCS considers it inappropriate to rate ADL dependency. Analysis also showed that very few children were respondents on the NMES data. This suggests that nationally, as well as in Arizona, children are rarely institutionalized. In light of these facts, we chose to estimate the model only for adults and children over age five. Sensitivity analysis methods were used to estimate the effects of omitting children on the cost-effectiveness results.

IADL Dependency

A dichotomous variable categorizing individuals as either dependent in at least one IADL (code="1") or as independent in all IADLs (code="0") was created. On the national data set, individuals were considered dependent in an IADL if they had difficulty performing the activity and required help, or could not perform the activity at all. On the Arizona data set, individuals were coded as dependent if the person required minimal (occasional or frequent cuing/supervision), moderate (step by step cuing or hands-on help) or maximum (totally dependent or unwilling to assist) assistance. However, because IADL information was not collected on the NMES for persons under the age of 18 all were coded as dependent in at least one IADL. To avoid dropping these cases, we sought a rationale for inputing IADL dependency to persons under 18. Three considerations dictated the decision rule employed: 1) any ADL-dependent person was assumed to also be dependent in at least one IADL, an assumption consistent with many national analyses;[30] 2) among individuals in the next age category (18-25) on the same data set (NMES), 84% of the non-ADL dependent were IADL dependent; and 3) by agreement with AHCCCSA, at the margin, errors should be made in the direction favoring a finding of cost-effectiveness of the ALTCS program.

Speech Impairment

Speech impairment, coded as a dichotomous variable, was suggested as a potentially important indicator of placement in an ICF/MR versus other setting during the site visit to Coolidge. Individuals on the national data set were coded as "1" if they did not talk at all or had difficulty being understood when talking. In the Arizona data, persons considered to have minimum, moderate or severe speech impairment were coded as impaired.

Maladaptive Behavior

Four dichotomous indicators of maladaptive behavior were created: 1) whether an individual hurts other people physically; 2) whether an individual hurts himself/herself physically; 3) whether an individual is unable to avoid danger; and 4) whether an individual frequently gets lost. On the national data set individuals were coded as "1" if the behavior was noted as being sometimes a problem. For Arizona, infrequent, frequent or constant problems were coded as "1."

Medical Conditions

Both data sets had binary indicators of various medical conditions. These dichotomous variables were summed into several count variables. In addition, a dichotomous indicator of the presence of at least one condition was constructed. Presence of a condition on the national data set was determined by whether the individual "does or did have" the condition. Although Arizona was more detailed in identifying conditions as acute, chronic or having a history of, any of these categories was considered as indicating the presence of the condition.

Handicaps

Dichotomous variables were created for each of the handicaps (blind, deaf, autism, epilepsy and cerebral palsy). Variables were coded as "1" if a handicap was present.

Equipment

Dichotomous variables were created for use of a wheelchair and use of a walker. Variables were coded as "1" if the individual was noted as using the particular piece of equipment.

Model Results

The estimated logistic regression risk model is presented in Table 5-3. The columns show the estimated parameters, standard errors, significance level and odds ratios. A significance level of .05 ($p < .05$) was used as the cut-off for inclusion of a variable in the model. If variables were considered theoretically important, exceptions to the inclusion criteria were made. Variables omitted from the model were tested for their effects on the coefficients of included variables. None were found to have an impact.

The odds ratio reflects the odds of residency in an ICF/MR associated with a particular trait, adjusted for the other variables in the model. For dichotomous variables, the odds ratio indicates how much more likely residence in an ICF/MR is for an individual with a given trait relative to an individual without that trait. For a continuous variable, the odds ratio represents the increased likelihood of ICF/MR residence for each additional unit. Odds ratios that are less than one indicate a reduction in risk.

Statistically significant factors positively associated with ICF/MR residence included being an adult, dependent in bathing, having at least one

Table 5-3

LOGISTIC **REGRESSION OF FACTORS DISCRIMINATING ICF/MR RESIDENTS FROM NON-ICF/MR RESIDENTS** IN **THE NATIONAL DATA SET**

	Parameter Estimate	Standard Error	Significance Level of Chi-Sauare	Odds Ratio
Demographics				
Age	**0.0060**	0.0031	0.0522	**1.06***
Adult	**0.4764**	0.1777	0.0073	1.61
White	**-0.3955**	0.1055	0.0002	0.67
Degree of Retardation				
Profound	**0.8965**	0.1368	0.0001	2.45
Severe	**-0.1676**	0.2500	0.5026	0.85
Other	**-1.6244**	0.3441	0.0001	0.20
ADL Dependency				
Bathing	**0.3909**	0.0953	0.0001	1.48
Toileting	**0.0234**	0.1824	0.8979	1.02
Incontinence	**-0.3107**	0.1136	0.0063	0.73
ADL5	1.1991	0.2705	0.0001	3.32
Other				
Any IADL	0.6929	0.1840	0.0002	2.00
Speech Impairment	-0.1906	0.0889	0.0321	0.83
Hurts People	0.3287	0.0834	0.0001	1.39
Autism	-0.5789	0.2013	0.0040	0.56
(Age) x (Severe)	0.0183	0.0061	0.0029	**1.20***
(Profound) x (ADL5)	-0.9392	0.3186	0.0032	0.39
(Profound) x (Toilet)	0.5630	0.2499	0.0243	1.76
Model Chi-squared	490.49			
Model p value	**.0001**			

Source: NMES Data Set, 1987.

*** The odds ratio is interpreted per IO-year increase in age.**

IADL dependency, and hurting other people physically. Each of these relationships agreed with those found in the previous research.

Statistically significant factors negatively associated with ICF/MR residence included autism, incontinence, having a speech impairment, being white and having an undefined degree of retardation.

In addition to the main effects, three interactions were found to be significant. When interactions are present, main effects must be interpreted along with any associated interactions.

For individuals who are not severely retarded, the odds of residing in an ICF/MR increases by 1.06 every ten years of life. The effect of increasing age, however, is greater for an individual who is severely retarded. While a severely retarded individual is less likely to reside in an ICF/MR than other persons early in life, as the person ages he/she becomes more likely than other persons to reside in an ICF/MR. This interaction is consistent with the interactions found by Rousey, Hanneman and Blacher.[31]

The effect of profound retardation on the risk of ICF/MR residence must be interpreted with both the interactions of toileting dependency and dependency in five or more ADLs. Profoundly retarded individuals who have five or more ADL dependencies, one of which is toileting, would be 5.7 times [exponent (.8965 + .0234 + 1.1991 - .9392+.5630)] more likely to reside in an ICF/MR than a profoundly retarded person who is not toileting dependent and has fewer than five ADL dependencies. The negative effect of the interaction between profound retardation and the presence of five or more ADL dependencies indicates that the combined effect of the two conditions is less than additive. This occurs because each effect separately is so substantial that when combined, the marginal effect of one, given the other, is reduced. On the other hand, the interaction between profound retardation and being dependent in toileting - a less risky condition than five ADLs - increases the effect of these individual variables. Rousey, Hanneman and Blacher[32] also found evidence supporting increased risk for profoundly retarded individuals with ADL dependencies.

Variables tested, but which did not enter into the model because they did not reach the minimum level of significance include other handicaps (cerebral palsy, epilepsy, blind and deaf), other ADLs, additional age categories, medical conditions, gender, unable to avoid danger, self-injurious behavior, wanders or gets lost, uses a wheelchair, uses a walker, and schizophrenic. None of these variables had an odds ratio significantly different from 1. Because the degree of retardation levels for mild and moderate were not found to be significant, it appears that risk for these individuals is no different than the risk faced by the borderline retarded (the reference group for each of the degree of retardation dummy variables).

Applying the Risk Model Results to Arizona Population Characteristics

The estimated coefficients produced by the final logit model were then multiplied by each ALTCS HCBS client's characteristics to determine the individual likelihood of ICF/MR residency. The probability that the ith person was an ICF/MR resident is equal to:

$$Pi = \frac{\exp^{(b0 \ t \ BiXi)}}{1 + \exp^{(b0 \ t \ BiXi)}}$$

where:

Pi = the predicted probability for the ith HCBS individual
exp = exponential function
b0 = intercept
Xi = vector of explanatory variables
Bi = vector of coefficients

The probability calculated for each person is equivalent to a "risk" score for ICF/MR residence. The mean and median risk scores for ALTCS clients

in ICF/MRs and HCB services are shown in Table 5-4 along with comparison figures for ICF/MR versus non-ICF/MR settings on the national data set.

Looking at the distribution of risk scores across the ICF/MR and non-ICF/MR groups (other institutions and community settings) indicates that 'the model tends to underestimate the risk of those in an ICF/MR. In other words, some individuals in ICF/MRs have very low risk scores. To increase the accuracy of the risk estimates (i.e., to improve the model's ability to correctly classify individuals as ICF/MR residents versus non-ICF/MR residents), several risk score thresholds were chosen to create dichotomous classifications of ICF/MR versus other residence among the ALTCS population.

Persons with risk scores above the threshold were considered to be ICF/MR residents (equivalent to having a risk score of 1), while those with risk scores below the threshold were considered to be residents in non-ICF/MR settings (equivalent to having a risk score of 0).

The method of choosing the appropriate threshold was to use the point that maximizes sensitivity (percent of individuals actually in ALTCS ICF/MRs classified as ICF/MR) and specificity (percent of individuals residing in ALTCS non-ICF/MRs settings found to be non-ICF/MR). Using this method, a threshold of 0.700 was chosen.

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The data indicated that the average length of stay is very long. Individuals tend to move among different HCB care settings, but if they go into an ICF/MR they tend to stay there. Aggregate deinstitutionalization efforts appear to have been substantially completed, making it safe to assume that there will not be many individuals moving from ICF/MRs into HCB services. Therefore it is appropriate to assume that a person's stay in HCB services would be equivalent to their expected stay in an ICF/MR.

Table 5-4

MEAN AND MEDIAN RISK SCORES FOR ALTCS AND NATIONAL SAMPLES

	ICF/MR	Non-ICF/MR	All Persons
ALTCS			
Mean	.753	.596	.606
Median	.790	.602	.617
Range	.231-.927	.062-.942	.062-.942
National			
Mean	.636	.507	.583
Median	.668	.481	.577
Range	.081-.953	.058-.924	.058-.953

Source: Combined Arizona data set created from AHCCCS LEDS and CATS data, 10/88 to 2/92; DES placement data, 12/88 to 1/93; and DES degree of retardation data, 9/92 (includes only those 4,776 individuals matched on all three files) for ALTCS; adjusted NMES Data Set, 1987 for National.

Monthly Costs

Thus, having estimated the probability of ICF/MR residence, and having set length of predicted ICF/MR stay to equal observed HCBS stay, the only additional information needed to calculate the cost-effectiveness of the ALTCS program for the MR/DD population is the monthly costs of HCB and ICF/MR services. For this purpose, monthly costs calculated in the reconciliation between HCFA and AHCCCSA for fiscal year (FY) 1990 were used. These were $1,523.88 per HCBS client and $5,598.80 per ICF/MR resident, respectively. These figures include all costs expended for clients in each of the settings.

Estimating Cost-Effectiveness

To calculate the risk score for the Arizona population over the age of five, the parameter estimates from the nationally derived model were multiplied by the characteristics of the ALTCS HCBS clients. These values were then summed and converted to a risk score using the probability formula presented earlier.

Figure 5-2 presents cost-effectiveness calculations using the 0.700 threshold score. The calculation is done using the clients (excluding children) for whom complete data was available. For this population, the program was cost effective.

To examine the impact on cost-effectiveness of HCBS utilization by children under six, the cost-effectiveness equation was recalculated using a "worst case" scenario. That is, because the NMES data show that very few children are residents of ICF/MRs nationally, we made the calculations based upon the assumption that children are at little or no risk of ICF/MR residence. We therefore set the risk score of all children under age six, to zero for purposes of the cost-effectiveness recalculation.

Figure 5-2

COST-EFFECTIVENESS OF THE ALTCS HCBS PROGRAM

1. ACTUAL COST OF HOME AND COMMUNITY-BASED AND ICF/MR SERVICES EXCLUDING CHILDREN UNDER SIX YEARS OF AGE: LEFT SIDE OF COST-EFFECTIVENESS EQUATION

HCB Services	879 x 1,523.88 =	$1,339,490.52
ICF/MR Services	65 x 5,598.80 =	363.922.00
Total		$1,703,412.52

2. ESTIMATED COSTS AT THE THRESHOLD SCORE OF 0.700 EXCLUDING CHILDREN UNDER SIX YEARS OF AGE RIGHT SIDE OF COST-EFFECTIVENESS EQUATION

HCB Services	305" x 5,598.80 =	$1,707,634.00
ICF/MR Services	65"" x 5,598.80 =	363.922.00
Total		$2,071,556.00

3. COST-EFFECTIVENESS AT THE THRESHOLD SCORE OF 0.700 EXCLUDING CHILDREN UNDER SIX YEARS OF AGE

Actual HCBS Cost	Estimated Cost Without HCBS	Savinos with HCBS
$1,703,412.52	$2,071,556.00	$368,143.48

Source: Combined Arizona data set created from AHCCCS LEDS and CATS data, October 1988 to February 1992; DES placement data, December 1988 to January 1993; and DES degree of retardation data, September 1992 (includes only those 4,776 individuals matched on all three files); and August 17, 1992 letter from Mabel Chen (AHCCCS) to Sidney Trieger (HCFA) regarding FY 90 costs.

* Number of HCB clients whose risk score exceeds the threshold score.
** Number of ICF/MR clients.

This scenario adds 351 clients and over $500,000 to the program's actual costs, with no offsetting and ICF/MR savings. This is because their risk is set to zero, meaning that none of this $500,000 would have been spent in the absence of HCB services. This addition makes savings negative, meaning cost-effectiveness falls short of being achieved by $166,738. However, this amount would fall to zero if just 30 of the 350 children in HCBS were judged to be using HCBS as a substitute for nursing home care. Judging from their high level of disability, this seems a very safe assumption, suggesting that the program is cost-effective even including children.

Other Issues

MR/DD PAS

A revised PAS instrument is scheduled to be implemented in early spring of 1993. DES staff felt that issues of inapplicability to the MR/DD population previously raised by DES concerning the PAS will be addressed by the revisions. Problems previously raised included: 1) some of the criteria used for EPD eligibility determination, such as medical problems, are not appropriate for MR/DD eligibility, and 2) different criteria are needed for different age ranges. DES staff have been involved in the revisions. Data regarding the development and pilot testing of the MR/DD PAS instrument were not available at the time of this report.

Supply of HCB Services

Although DES is the program contractor for the MR/DD population throughout the entire state, not all services are available in all counties. DES submits quarterly "gap" reports to AHCCCSA describing which counties are without certain services (i.e., have two or fewer providers). According to DES staff, in many instances these gaps are not problematic because there is no service demand. Table 5-5 lists the service gaps by county for the quarter

Table 5-5

DES PROVIDER GAPS FOR ARIZONA COUNTIES*
FROM 1/1/92 TO 3/31/92 BY SERVICE

	Apache	Coconino	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Day Treatment and Training					X								X
Habilitation					X								
Home Health Aide	X	X	X	X	X		X	X		X	X	X	X
Home Health Nursing					X		X					X	X
Occupational Therapy		X	X	X	X		X				X		X
Personal Care	X				X		X						X
Physical Therapy			X	X	X						X		X
Rehabilitation Instructional Service					X								
Speech Therapy			X	X	X						X	X	X
Transportation			X	X	X		X				X		X

Source : DES/DDD Provider Gap Report for the period 1/1/92 - 3/1/92, submitted to AHCCCS May 1, 1992.

* Excludes Cochise and Gila counties
X Indicates that service is not available

beginning January 1, 1992 and ending March 31, 1992, presumably a representative time-period. Therapies in particular are a statewide problem and transportation is a problem in rural areas. Not surprisingly the urban counties, Pima and Maricopa, have no gaps. These are the two most populated counties and as a result have better than average provider coverage.

DES creates short- and long-range strategies to deal with these gaps. Staff reported that if DES cannot meet its service provider needs with one Request for Proposal (RFP), it sends out another more focused request indicating particular needs in targeted geographic areas. Because family foster care is not covered by the RFP process, DES can recruit families without issuing an RFP. In addition, services paid for exclusively under Title XIX can be exempt from the request for proposal process when necessary. This exemption is in effect until October 1, 1993. DES staff feel it should be made permanent because it allows them to respond to needs in a timely fashion. As an example, they are working to recruit personal care providers in several counties through the exemption. Other strategies include networking with public schools and professional workshops to secure additional providers and developing recruitment videos for adult day health and foster care providers.

Policy Implications

Our research suggests that Arizona's stunning success in serving 97% of its MR/DD population in non-ICF/MR settings is attributable to state deinstitutionalization policy which preceded ALTCS and has not been compromised by program implementation.

DES' placement strategy highlights its commitment to non-institutionalization. DES case managers first attempt to keep the client in the family home. If out-of-home placement is necessary, DES staff attempt to match clients' needs and capabilities with the least restrictive placement setting. DES offers a hierarchy of settings from foster homes for children

and adults to group homes to ICF/MRs. DES has placed approximately ten clients in ICF/MRs since ALTCS began.

It appears that ALTCS clients served in HCBS settings come from a population that in many other states would be served in ICF/MRs. Analysis of clients' level of dependence, degree of retardation, and medical needs, and on-site observation of a subset of clients, suggest that ALTCS is serving a predominately severely dependent MR/DD population. In addition, based upon three-year cost-effectiveness estimates, it appears that ALTCS is serving its MR/DD population on a cost-effective basis.

6. COST OF ADMINISTERING THE PROGRAM

Introduction

This chapter analyzes Arizona Long-Term Care System (ALTCS) administrative costs for elderly and physically disabled (EPD) contractors during the third ALTCS program year, fiscal year 1991 (FY 91). It also reports on administrative costs for the Arizona Department of Economic Security (DES), the statewide contractor for mentally retarded/developmentally disabled (MR/DD) eligibles, for FY 89, FY 90, and FY 91. In the first two Implementation and Operation Reports, the costs of administering the ALTCS EPD program for FY 89 and FY 90, the first two years of the program, were examined. In these previous reports, data were not available from DES.

The administrative costs for the ALTCS program include the costs of the Arizona Health Care Cost Containment System Administration (AHCCCSA) allocable to ALTCS, as well as the administrative costs of the long-term care program contractors. The ALTCS program incorporates several features that can have an impact on both the medical and administrative costs of the program, compared to a traditional Medicaid program. Many of these features — prescreening, case management, prepaid capitation of both acute and long-term care services — are designed both to provide care in a more efficient manner and to reduce medical costs. However, it is also possible that these features will increase ALTCS administrative costs.

Total administrative costs experienced may also be affected by the decentralization of administrative tasks to the long-term care program contractors. For example, prescreening and eligibility determination are handled primarily by the state, but case management, procurement of providers, and service coordination are the responsibility of program contractors. Thus, in addition to the administrative costs for the ALTCS program experienced by

AHCCCSA, each ALTCS contractor requires administrative staff to perform necessary tasks such as monitoring enrollment, data processing, financial management, claims processing, provider relations, contract administration, case management, quality assurance, and utilization review.

The data presented in this chapter were provided by AHCCCSA and the long-term care program contractors. Data prepared for the HCFA-64 financial report contain ALTCS administrative costs incurred by AHCCCSA. The financial reports required by AHCCCSA from the program contractors contain data on administrative costs incurred by the contractors.

This chapter documents the costs of administering the ALTCS EPD program for FY 91 and the ALTCS MR/DD program for FY 89, FY 90, and FY 91. It begins with a section on major evaluation issues and findings and concludes with a section on policy implications.

Major Evaluation Issues and Findings

In this section, we will discuss: 1) the costs of AHCCCSA to administer the ALTCS program, 2) the administrative costs of the long-term care program contractors, and 3) comparison of ALTCS administrative costs with those of other medical care programs.

ALTCS Administrative Costs Incurred by AHCCCSA

The organizational unit in AHCCCS with responsibility for administrative costs is the Finance Department in the Division of Business, Finance and Research. In order to understand the AHCCCS administrative costs for ALTCS, it is necessary to understand the process by which the AHCCCS accounting system produces internal information on administrative costs. This process is composed of five parts: 1) allocation of personnel and employee-related expenses, 2) allocation of payments for invoices, 3) allocation of other administrative expenditures, 4) preparation of the HCFA-64 report, and 5)

preparation of the summary worksheet entitled "Summary of AHCCCSA Administration Expenditure for Quarter Ended MM/DD/YY." The cost allocation process used by AHCCCSA was described in detail in the first Implementation and Operation Report.[33]

ALTCS administrative costs are tracked as a separate category of the administrative costs incurred by AHCCCSA. Detail on ALTCS administrative costs is available from the records that are maintained by AHCCCSA for the HCFA-64 Quarterly Financial Report. The federal share of administrative costs incurred by AHCCCSA for the ALTCS program are reimbursed by the Health Care Financing Administration (HCFA) according to the standard methods used for reimbursement of state and local administrative costs under the Medicaid program. AHCCCSA has a detailed accounting system that records all administrative expenditures that are eligible for federal reimbursement, by category of expense. The expense categories correspond to different types of administrative costs that are reimbursed at different rates of federal financial participation (FFP). These rates vary between 50 percent and 100 percent depending on the category of expense.

The HCFA-64 report is used to claim federal funds for HCFA's share of AHCCCS' administrative expenditures. On the HCFA-64 report, administrative costs are reported in the categories listed below. The numbers in parentheses refer to the FFP rate (i.e., the percentage paid by HCFA) for each administrative category. These categories are:

- Design, development and installation of the Prepaid Medicaid Management Information System (PMMIS) (90 percent)
- Skilled professional medical personnel (75 percent)
- Operation of an approved MMIS (75 percent)
- Mechanized systems, not approved under MMIS procedures (50 percent)
- Peer review organizations (75 percent)
- Other financial participation (50 percent)
- Third party liability recovery procedures (50 percent)

- Immigration status verification system costs (100 percent)
- Nurse aide training costs (50 percent)
- Preadmission screening (PAS) costs (75 percent)
- Preadmission screening and annual resident review (PASARR) activities costs (75 percent)
- Family planning (90 percent)

Each quarter the Finance Department produces a computerized spreadsheet that summarizes all administrative costs for AHCCCS for the financial quarter being reported. This information is used to prepare the HCFA-64 report. The ALTCS administrative costs for AHCCCSA are also produced as part of this worksheet.

Table 6-1 summarizes ALTCS administrative costs for fiscal years 1989, 1990, and 1991. Total ALTCS administrative costs incurred by AHCCCSA were $11.5 million for FY 89, $14.9 million for FY 90, and $13.1 million for FY 91. The decrease of $1.8 million (12%) in administrative expenditures for the ALTCS program from FY 90 to FY 91 is attributable mostly to significant decreases in personnel expenses and other operating expenses. The administrative costs for FY 89 exclude pre-operational expenses that were incurred prior to the start of ALTCS program operations.

Table 6-2 shows the quarterly ALTCS administrative costs incurred by AHCCCSA by type of expense for FY 91. The personnel expenses of AHCCCSA do not include wages or salary expenses for contractor personnel that provide services to AHCCCSA. The expenses for contractor personnel are included in other professional and outside expenses.

Table 6-3 shows average monthly administrative costs by six-month time periods, starting with the first two quarters of FY 89 (October 1, 1988 to March 31, 1989). Personnel expenses were highest in the fourth six-month time period ($869,150 in the last two quarters of FY 90). Personnel expenses decreased in the fifth time period to $689,660 for the first two quarters of

Table 6-1

ALTCS ADMINISTRATIVE COSTS INCURRED BY AHCCCSA
BY TYPE OF EXPENSE FOR FY 89, FY 90, AND FY 91

	FY 89*	FY 90	FY 91
Personnel Expenses	$ 6,779,244	$ 9,732,063	$ 8,575,485
PAS	115,079	718,130	689,391
PASAAR	77,564	269,728	95,743
Skilled Professional Medical Personnel	1,022,159	1,738,506	1,808,841
MMIS Operation	182,998	353,259	64,721
PMMIS Operation	0	0	158,249
Other LTC	5,381,444	6,652,440	5,758,540
Non-Personnel Expenses	4,701,184	5,124,997	4,569,926
PMMIS Development	736,744	111,914	0
Other Professional and Outside Expenses	503,697	1,063,086	1,530,148
Travel	80,402	165,937	80,567
Other Operating Expenses	2,040,499	2,824,512	1,643,796
Capital Expenses	794,683	163,257	8,960
Adjustments			
Depreciation	153,042	174,987	348,195
Dept. of Admin. (DOA)	392,117	621,304	958,260
Administrative Costs	$11,480,428	$14,857,060	$13,145,411
Administrative Costs excluding PMMIS development costs	$10,743,684	$14,745,146	$13,145,411

Source: Summary of AHCCCSA administrative expenditures for quarter ended for dates shown above, Finance Department, Division of Business, Finance, and Research, AHCCCS.

* Excludes pre-operational expenditures.

Table 6-2

QUARTERLY ALTCS ADMINISTRATIVE COSTS INCURRED
BY AHCCCSA BY TYPE OF EXPENSE FOR FY 91

	Quarter Ending				
	12/31/90	3/31/91	6/30/91	9/30/91	Total
Personnel Expenses	$2,185,219	$1,952,736	$2,112,638	$2,324,892	$ 8,575,485
PAS	159,263	134,814	183,229	212,085	689,391
PASAAR	39,838	47,771	5,556	2,578	95,743
Skilled Professional Medical Personnel	362,236	532,366	425,180	489,059	1,808,841
MMIS Operation	32,283	32,438	0	0	64,721
PMMIS Operation	0	0	32,919	125,330	158,249
Other LTC	1,591,599	1,205,347	1,465,754	1,495,840	5,758,540
Non-Personnel Expenses	854,615	1,355,258	1,319,522	1,040,531	4,569,926
PMMIS Development	0	0	0	0	0
Other Professional and Outside Expenses	312,049	308,341	735,716	174,042	1,530,148
Travel	20,669	38,397	2,978	18,523	80,567
Other Operating Expenses	134,301	775,706	78,896	654,893	1,643,796
Capital Expenses	658	8,302	0	0	8,960
Adjustments					
Depreciation	55,209	97,662	97,662	97,662	348,195
DOA	331,729	126,850	404,270	95,411	958,260
Administrative Costs	$3,039,834	$3,307,994	$3,432,160	$3,365,423	$13,145,411

Source : Summary of AHCCCSA administrative expenditures for quarter ended for dates shown above, Finance Department, Division of Business, Finance, and Research, AHCCCS Administration.

Table 6-3

AVERAGE MONTHLY ALTCS ADMINISTRATIVE COSTS INCURRED BY AHCCCSA BY TYPE OF EXPENSE FOR THE FIRST AND SECOND SIX-MONTH PERIODS OF FY 89, FY 90, AND FY 91

	First 6 Months of FY 89* (10/88 - 3/89)	Second 6 Months of FY 89 (4/89 - 9/89)	First 6 Months of FY 90 (10/89 - 3/90)
Personnel Expenses	$ 653,826	$ 802,961	$ 752,861
PAS	0	19,180	55,448
PASAAR	0	12,927	28,221
Skilled Professional Medical Personnel	88,712	126,004	138,730
MMIS Operation	8,133	26,433	33,051
PMMIS Operation	0	0	0
Other LTC	556,981	618,417	497,411
Non-Personnel Expenses	556,272	505,395	496,809
PMMIS Development	89,965	77,808	18,027
Other Professional and Outside Expenses	10,059	78,920	114,862
Travel	9,858	8,471	16,121
Other Operating Expenses	188,670	245,748	260,868
Capital Expenses	208,162	28,366	19,719
Adjustments			
Depreciation	14,080	18,467	10,847
DOA	35,479	47,614	56,366
Administrative Costs	1,210,098	1,308,356	1,249,670
Administrative Cost Per Member Per Month	$ 206.33	$ 165.41	$ 121.69

Table 6-3 (Concluded)

AVERAGE MONTHLY ALTCS ADMINISTRATIVE COSTS INCURRED BY AHCCCSA BY TYPE OF EXPENSE FOR THE FIRST AND SECOND SIX-MONTH PERIODS OF FY 89, FY 90, AND FY 91

	Second 6 Months of FY 90 (4/90 - 9/90)	First 6 Months of FY 91 (10/90 - 3/91)	Second 6 Months of FY 91 (4/91 - 9/91)
Personnel Expenses	$ 869,150	$ 689,660	$ 739,589
PAS	64,240	49,013	65,886
PASAAR	16,734	14,602	1,356
Skilled Professional Medical Personnel	151,021	149,100	152,373
MMIS Operation	25,826	10,787	0
PMMIS Operation	0	0	26,375
Other LTC	611,329	466,158	493,599
Non-Personnel Expenses	357,357	368,312	393,342
PMMIS Development	625	0	0
Other Professional and Outside Expenses	62,319	103,398	151,626
Travel	11,535	9,844	3,584
Other Operating Expenses	209,885	151,668	122,298
Capital Expenses	7,491	1,493	0
Adjustments			
Depreciation	18,318	25,479	32,554
DOA	47,184	76,430	83,280
Administrative Costs	1,226,507	1,057,972	1,132,931
Administrative Cost Per Member Per Month	$ 119.45	$ 86.97	$ 87.45

Source: Summary of AHCCCSA administrative expenditures for quarter ended for dates shown above, Finance Department, Division of Business, Finance, and Research, AHCCCS.

* Excludes pre-operational ALTCS administrative costs for first quarter of FY 89 ending December 31, 1988.

FY 91. Personnel expenses increased slightly in the last two quarters of FY 91 to $739,589.

As shown in Table 6-3, non-personnel expenses were highest in the first two quarters of FY 89 ($556,272) and declined for the next three time periods. In the last two quarters of FY 90, non-personnel expenses had declined to $357,357. Non-personnel expenses increased to $368,312 and $393,342 for the first two quarters and last two quarters of FY 91, respectively. The last line in Table 6-3 shows the ALTCS administrative costs of AHCCCSA on a per member per month basis. Total administrative costs declined from $206.33 per member per month in the first six-month period of ALTCS program operations to $165.41, $121.69, $119.45, and $86.97 for the next four six-month periods, respectively. Administrative costs per member per month increased slightly in the last six-month period (April 1 to September 30, 1991) to $87.45.

Table 6-4 provides a summary of ALTCS administrative costs incurred by AHCCCSA on a per member per month basis. For FY 89, the costs per member per month exclude the pre-operational expenses that occurred prior to the start of ALTCS program operations in December 1988. Excluding pre-operational expenses, the costs per member per month were $176.47. For FY 90, ALTCS administrative costs incurred by AHCCCSA were $120.56 per member per month, and they decreased to $87.22 in FY 91.

The last line in Table 6-4 shows the per member per month administrative costs excluding PMMIS development costs. In order to have a fair comparison between the administrative costs of the ALTCS program and those of other programs, the start-up PMMIS development costs should be excluded. Thus, ALTCS administrative costs, excluding pre-operational expenses and PMMIS development costs, were $165.15 per member per month in FY 89, $119.65 per member per month in FY 90, and $87.22 per member per month in FY 91. As illustrated by Tables 6-3 and 6-4, ALTCS administrative costs incurred by AHCCCSA decreased over the first three years of the program, both in aggregate and on a per member per month basis. The new PMMIS became operational on April 1, 1991. Administrative costs may increase in FY 92 as the full PMMIS operations costs come on-line.

Table 6-4

ALTCS ADMINISTRATIVE COSTS PER MEMBER PER MONTH INCURRED BY AHCCCSA BY TYPE OF EXPENSE FOR FY 89, FY 90, AND FY 91

	FY 89*	FY 90	FY 91
Personnel Expenses	$104.21	$ 78.97	$56.90
PAS	1.77	5.83	4.57
PASAAR	1.19	2.19	0.64
Skilled Professional Medical Personnel	15.71	14.11	
MMIS Operation	2.81	2.87	12.40
PMMIS Operation	0.00	0.00	1.05
Other LTC	82.72	53.98	38.21
Non-Personnel Expenses	72.27	41.59	30.32
PMMIS Development	11.32	0.91	0.00
Other Professional and Outside Expenses	7.74	8.63	10.15
Travel	1.24	1.35	0.53
Other Operating Expenses	31.37	22.92	10.91
Capital Expenses	12.22	1.32	0.06
Adjustments			
Depreciation	2.35	1.42	2.31
DOA	6.03	5.04	6.36
Administrative Costs	$176.47	$120.56	$87.22
Administrative Costs excluding PMMIS development costs	$165.15	$119.65	$87.22

Source: Summary of AHCCCSA administrative expenditures for quarter ended for dates shown above, Finance Department, Division of Business, Finance, and Research, AHCCCS.

* Excludes pre-operational expenditures.

Lona-Term Care Contractors' Administrative Costs

This section discusses the administrative costs of the program contractors for EPD eligibles for FY 91, the third year of the ALTCS program and administrative costs for MR/DD eligibles for FY 89 through FY 91. The EPD administrative costs for FY 89 and FY 90 were presented in the first two Implementation and Operation Reports.

The primary data sources used in this section are the quarterly and annual financial reports that are submitted by participating long-term care contractors to AHCCCSA. In this chapter administrative costs include all of the categories specified by the financial reports required by AHCCCSA: compensation (personnel expenses), case management, data processing, management fees, insurance, interest, occupancy (rent/utilities), depreciation and amortization, and other expenses.

The first category, compensation, includes wages, salaries, fringe benefits, and other employee-related expenses not related to case management. It does not include any case management costs, including salaries paid to case managers. The second category, case management, consists of the costs of providing case management services to ALTCS eligibles, including salary expenses for case management. The third category, data processing, is for costs of the development and operation of a Management Information System (MIS) and other data processing systems. The fourth category, management fees, is composed of fees paid to management companies that provide administrative services for ALTCS program operations (i.e., Health Management Associates (HMA) was paid a management fee by Ventana Health System (VHS) for the years they managed VHS). The fifth category, insurance, consists of the cost of insurance related to ALTCS. In the case of Pima County, Pima Health System (PHS) is charged a portion of the cost of the county's self-insured plan. The sixth category, interest expense, is interest payments made by program contractors on loans for ALTCS operations. The seventh category, occupancy, is rent, utilities and other occupancy expenses. The eighth category, depreciation, consists of charges for depreciation expenses and

other costs that are amortized. The final category, other, includes all other administrative expenses that are not included in the previous categories.

The organizational units responsible for administering ALTCS operations at each contractor were described in the first Implementation and Operation Report. The administrative procedures used by each contractor were also discussed in that report.[34] Below we describe the administrative cost data reported separately for the EPD program contractors and for DES, the statewide MR/DD contractor.

EPD Program Contractors

Table 6-5 presents a summary of the FY 91 administrative costs of the program contractors serving EPD eligibles. The largest contractor, Maricopa County Long-Term Care (Maricopa LTC), had administrative costs of $8.9 million in FY 91. The four next largest contractors, PHS, VHS, Pinal LTC, and APIPA had FY 91 administrative costs of $3.3 million, $2.4 million, $437,392, and $518,138 respectively. The smallest EPD contractor, Comprehensive AHCCCS Plan (CAP), had administrative costs of $114,690 for FY 91.

Although the quarterly and annual financial reports represent the best available information on administrative costs of long-term care contractors, some caveats should be noted in examining the data. First, some contractors (Maricopa LTC and PHS) have fiscal year ends of June 30th. Therefore, the data for the quarter ending September 30, 1991 is unaudited and subject to change. Thus, the results should be viewed as preliminary.

Second, AHCCCSA does not complete a Quarterly Financial Report for the counties for which it serves as program contractor. These costs are reported in the overall ALTCS administrative costs. These costs would be contractor-related costs if AHCCCSA did not perform these activities. Thus, contractor costs are understated and ALTCS administrative costs are overstated by this amount:

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Table 6-5

ADMINISTRATIVE COSTS OF ALTCS EPD CONTRACTORS BY TYPE OF COST FOR FY 91
(contractors are presented in order of size)

	Maricopa LTC	PHS	VHS	Pinal LTC	APIPA	CAP	Total
Compensation (includes taxes)	$2,486,357	$1,709,143	$ 0	$142,649	$ 0	$ 0	$ 4,338,149
Case Management	2 617,495	770,831 94,338	617,129	175,760 29,594	139,957	0	4,707,961
Data Processing			0		0	74,690	2,588,521 741,427
Management Fees	355,324	0	1,771,266	9,060	378,181	0	
Insurance	0	0	0	0	0	0	148,382
Interest	434,260	205,930	11	13,500	0		
Occupancy (Rent/Utilities)					0	0	0
Depreciation/Amortization	305,133	0	0	2,065	0	0	653,690 307,198
Other	1,737,598	356,908	0	60,233	0	0	2,154,739
Administrative Costs	$8,900,451	$3,281,001	$2,388,395	$437,392	$518,138	$114,690	$15,640,067

Source: Annual Audited Reports and Quarterly Financial Reports submitted to AHCCCSA by the participating long-term care contractors.

Third, two of the contractors, Maricopa LTC and PHS, are components of large, county government organizations. Therefore, identification and measurement of administrative costs for the ALTCS program involves estimating and allocating expenses from multiple departments within the county government organization. The allocation methods used by these contractors greatly affects the costs allocated.

Fourth, although attempts have been made to standardize the reporting of data by AHCCCSA, an examination of Table 6-5 makes clear that different contractors are reporting similar data in different ways. For example, most of the administrative costs for VHS for FY 91 are reported in management fees. This is because all employees were part of a management contract. Thus, VHS shows no compensation, data processing expense, insurance, interest, occupancy or depreciation/amortization. These expenses are included in VHS's management fee.

Table 6-6 shows the administrative costs of each contractor on a per member per month basis for FY 91. The administrative costs for each type of cost are divided by the effective number of member-months for each contractor. The contractor with the largest cost was APIPA with $182.70 per member per month in administrative costs, and the contractor with the smallest cost was CAP with $129.59 per member per month. The average for all EPD contractors was $161.12 per member per month.

Table 6-7 compares the actual administrative costs of the ALTCS EPD program contractors to the budgeted amounts in the monthly capitation payments in FY 91. The actual costs were less than budget for most contractors in FY 91. AHCCCSA negotiates the case management and other administrative costs budgets with the program contractors. A key factor is the level of actual administrative costs experienced by the contractors.

As shown in Table 6-7, the budget for case management costs per member per month in FY 91 was $66.12 for CAP, $72.37 for VHS, and $73.00 for Maricopa LTC, PHS, Pinal LTC, and APIPA. The FY 91 case management costs per member per month, from largest to smallest, were: $54.64 for Pinal LTC, $52.80 for

Table 6-6

ADMINISTRATIVE COSTS PER MEMBER PER MONTH OF ALTCS
EPD CONTRACTORS BY TYPE OF COST FOR FY 91

	Maricopa LTC	PHS	VHS	Pinal LTC	APIPA	CAP	Total
Compensation (includes taxes)	$ 44.29	$ 91.13	$ 0.00	$ 44.34	$ 0.00	$ 0.00	$ 44.69
Case Management	52.80	41.10	40.51	54.64	49.35	45.20	48.50
Data Processing	11 .oo	5.03	0.00	9.20	0.00	0.00	7.64
Management Fees	6.33	0.00	116.27	2.82	133.35	84.40	22.77
Insurance	0.00	7.67	0.00	1.41	0.00	0.00	1.53
Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Occupancy (Rent/Utilities)	7.74	10.98	0.00	4.20	0.00	0.00	6.73
Depreciation/Amortization	5.44	0.00	0.00	0.64	0.00	0.00	3.16
Other	30.95	19.03	0.00	18.72	0.00	0.00	26.09
Administrative Costs	$158.54	$174.94	$156.78	$135.96	$182.70	$129.59	$161.12

Source: Annual Audited Reports and Quarterly Financial Reports submitted to AHCCCSA by the participating long-term care program contractors.

Table 6-7

COMPARISON OF FY 91 ACTUAL EXPENDITURES TO BUDGET OF THE EPD CONTRACTORS BY TYPE OF ADMINISTRATIVE COST (contractors are presented in order of size)

	Actual Expenditures	Budget	Difference	Percentage Difference
Case Management Costs	$ 48.50	$ 72.84	($24.34)	-33.4%
Maricopa LTC	52.80	73.00	(20.20)	-27.7
PHS	41.10	73.00	(31.90)	-43.7
VHS	40.51	72.37	(31.86)	-44.0
Pinal LTC	54.64	73.00	(18.36)	-25.2
APIPA	49.35	73.00	(23.65)	-32.4
CAP	45.20	66.12	(20.92)	-31.6
Other Administrative Costs	$112.62	$124.53	($11.91)	- 9.6%
Maricopa LTC	105.74	124.19	(18.45)	-14.9
PHS	133.84	123.98	9.86	8.0
VHS	116.27	118.05	(1.78)	- 1.5
Pinal LTC	81.32	116.37	(35.05)	-30:1
APIPA	133.35	168.71	(35.36)	-21 .o
CAP	84.39	157.52	(73.13)	-46.4
Total Administrative Costs	$161.12	$197.37	($36.25)	-18.4%
Maricopa LTC	158.54	197.19	(38.65)	-19.6
PHS	174.94	196.98	(22.04)	-il.2
VHS	156.78	190.42	(33.64)	-17.7
Pinal LTC	135.96	189.37	(53.41)	-28.2
APIPA	182.70	241.71	(59.01)	-24.4
CAP	129.59	223.64	(94.05)	-42.1

Source: Quarterly Financial Reports submitted to AHCCCSA by the participating long-term care program contractors.

Maricopa LTC, $49.35 for APIPA, $45.20 for CAP, $41.10 for PHS, and $40.51 for VHS. The average case management cost for all EPD contractors was $48.50 per member per month. The budget exceeded actual expenditures for every contractor.

Actual expenditures for other administrative costs, excluding case management, ranged from a low of $81.32 per member per month for Pinal LTC to a high of $133.84 for PHS. For FY 91 the percentage (of long-term care capitation plus case management) for other administrative costs was 8.0 percent for Maricopa LTC, PHS, Pinal LTC, and VHS, 11.5 percent for APIPA, and 10.2 percent for CAP. The program contractors were allowed the following amounts for other administrative costs as part of the monthly capitation payment paid to them by AHCCCS: Maricopa LTC, $124.19; PHS, $123.98; VHS, $118.05; CAP, $157.52; Pinal LTC, $116.37; and APIPA, $168.71. For all EPD contractors combined, actual expenditures for other administrative costs were less than the budgeted amount by 9.6 percent.

Administrative costs, including case management and other administrative costs, are also compared to budgeted amounts in Table 6-7. In aggregate, administrative costs for all of the contractors were less than the budgeted amounts by 18.4 percent. For Maricopa LTC in FY 91, administrative costs of $158.54 per member per month were $38.65 less than the budget of $197.19 per member per month. A similar pattern was observed for the other contractors. Administrative costs were less than the budgeted amount by 19.6 percent for Maricopa LTC, 11.2 percent for PHS, 17.7 percent for VHS, 24.4 percent for APIPA, 28.2 percent for Pinal LTC, and 42.1 percent for CAP.

MR/DD Program Contractor (DES)

As part of its mission to provide acute and long-term care services to MR/DD eligibles under the ALTCS program, the Division of Developmental Disabilities (DDD) in the DES incurs administrative expenses in addition to the costs of medical services. This section describes the administrative cost

allocation methodology used and presents DES administrative costs for state fiscal year (SFY) 89 through SFY 92.

Administrative Cost Allocation System

DDD serves both ALTCS clients and non-ALTCS clients. The non-ALTCS MR/DD clients do not qualify for Medicaid, and the federal government does not pay for any services delivered to non-ALTCS clients. All care provided to non-ALTCS clients is paid for with state funds.

The federal government pays for the share of DES administrative costs that is allocated to ALTCS clients plus medical service costs. DES has a detailed cost allocation process whereby costs are allocated to ALTCS or state-only clients. As discussed in more detail later in this chapter, DES has a chart of accounts with a detailed list of expense categories. There are three main types of expenses: 1) direct program expenses, 2) overhead expenses, and 3) general and administrative expenses. Direct program expenses include compensation (salary, wages, fringe benefits, etc.), professional and outside services, lease/rent of office space, lease/rent of equipment, utilities, supplies, travel costs, telecommunications, printing, postage and delivery, etc. Case management services provided to MR/DD beneficiaries are expensed in these categories.

The second type of expenses, overhead expenses, are Y-codes (i.e., account codes that begin with Y). They are support activities within DES, such as fiscal management, legal, and automated data processing (ADP) that are allocated to direct programs. The third category of expenses, general and administration expenses, are Z-codes (i.e., account codes that begin with Z). They are general administration activities within DES that are allocated to direct programs.

To determine the appropriate allocation of costs to ALTCS or non-ALTCS clients, the TRAILS system is used. In this system, work-sampling of all categories of employees is done periodically to determine the proportion of

time that is devoted to ALTCS clients versus non-ALTCS clients. A ratio is developed that is applied on a quarterly basis to all costs for that category of work. Currently, the ratio for case management costs is 63.271 percent (e.g., 63.271 percent of case management costs (personnel, travel, etc.) are allocated to ALTCS clients).

Administrative Costs

Table 6-8 summarizes the DES administrative costs for MR/DD eligibles for the first four state fiscal years of the program. The data for SFY 89 through SFY 90 are derived from audited statements that were used for the financial reconciliation between HCFA and Arizona for those years. The data for SFY 91 and SFY 92 are from the latest available financial reports. Audits for those years have not yet been completed.

DES administrative costs, including case management costs, increased from $6.7 million in SFY 89 to $15.3 million in SFY 90 to $17.2 million in SFY 91. In SFY 92 they decreased to $15.7 million. It should be noted that the ALTCS program started on December 19, 1988 for MR/DD eligibles. Therefore, the data for SFY 89 include only a little more than six months of program operation. Administrative costs increased by 12.5 percent from SFY 90 to SFY 91, and they decreased by 8.9 percent from SFY 91 to SFY 92.

Case management costs ranged from $2.1 million in SFY 89 to $3.4 million in SFY 90 to $5.3 million in SFY 91 to $5.4 million in SFY 92. Other administrative costs began at $4.6 million in SFY 89, increased to $11.9 million in SFY 90 and SFY 91, and then decreased to $10.3 million in SFY 92.

The number of days of LTC eligibility increased significantly during the first four state fiscal years of the program. The fourth row of Table 6-8 presents the administrative costs per day of eligibility. Over the first four state fiscal years of the program, administrative costs per day of eligibility

Table 6-8

DES ADMINISTRATIVE COSTS FOR MR/DD ELIGIBLES:
SFY 89 THROUGH SFY 92

	SFY 89	SFY 90	SFY 91	SFY 92
Administrative Costs*	$6,723.1	$15,268.3	$17,174.3	$15,654.2
Case Management	2,129.7	3,388.9	5,273.1	5,387.7
Other Costs	4,593.4	11,879.3	11,901.2	10,266.5
Cost Per Day of Eligibility	30.36	18.56	12.56	10.14
Case Management	9.62	4.12	3.86	3.49
Other Costs	20.74	14.44	8.70	6.65
Cost Per Member Per Month	923.44	564.63	381.97	308.52
Case Management	292.52	125.32	117.28	106.18
Other Costs	630.92	439.30	264.69	202.34

Source: Arizona Department of Economic Security.

* Administrative costs are shown in thousands of dollars.

decreased from $30.36 to $10.14. Case management costs per day decreased from $9.62 in SFY 89 to $4.12, $3.86 and $3.49 in state fiscal years 1990, 1991 and 1992, respectively. Other administrative costs also decreased from $20.74 in SFY 89 to $14.44 in SFY 90, $8.70 in SFY 91, and $6.65 in SFY 92.

The seventh row of Table 6-8 presents the DES administrative costs on a per member per month basis. The results are similar to those for costs per day of eligibility. In general, the DES administrative costs are higher than the administrative costs of the EPD contractors. This is true both for case management costs and for other administrative costs.

There is little detail available for DES administrative costs in SFY 89 and SFY 90. Table 6-9 presents detailed information on DES administrative costs for SFY 91 and SFY 92. It should be remembered that the data for SFY 91 and SFY 92 are unaudited and should be considered preliminary. For each year, the costs are arrayed by type of administrative expense. In addition, the cost per member per month is shown for each year by expense category. As shown in Table 6-9, DES administrative cost decreased from $381.97 per member per month in SFY 91 to $308.52 per member per month in SFY 92, a decrease of 19.2 percent. Case management expenses represented 30.7 percent of DES administrative costs in SFY 91 and 34.4 percent in SFY 92. Compensation accounted for 30.5 percent and 40.8 percent of DES administrative costs in SFY 91 and SFY 92, respectively. Compensation to DDD was the largest component in both years (15.3 percent in SFY 91 and 28.0 percent in SFY 92). There were significant decreases in central services costs ($1.9 million in SFY 91 to $1.3 million in SFY 92) and in professional and outside services costs ($1.0 million in SFY 91 to $0.3 million in SFY 92).

Detail on case management costs is presented in Table 6-10 for the most recent five quarters, ending September 30, 1992. Table 6-11 presents quarterly case management costs, by expense category, per full-time equivalent case manager. Quarterly case management expenses for MR/DD eligibles were relatively constant over the five quarters ending September 30, 1992. They ranged from a low of $1.2 million in the quarter ending September 30, 1991 to a high of $1.4 million in the quarter ending March 31, 1992. The pattern was

Table 6-9

SUMMARY OF DES ADMINISTRATIVE COSTS
FOR SFY 91 AND SFY 92
(cost in thousands)

	SFY 91		SFY 92	
	cost	cost Per Member Per Month	Cost	cost Per Member Per Month
Compensation	$ 5,239.8	$116.54	$ 6,387.9	$125.90
Division of Developmental Disabilities	2,630.4	58.50	4,384.8	86.42
Fiscal Management	410.7	9.13	600.6	11.84
Legal	123.7	2.75	5.9	0.12
Adult Services	240.8	5.36	3.1	0.06
Residential Services	274.3	6.10	47.7	0.94
Child Services	291.4	6.48	245.4	4.84
Therapy Services	81.1	1.80	57.8	1.14
Staff Training	239.7	5.33	229.2	4.52
Quality Assurance	0.0		13.3	0.26
Licensing and Monitoring	238.0	0.00 5.29	323.6	6.38
Implementation Team	197.8	4.40	120.4	2.37
Managed Care	511.7	11.38	356.0	7.02
Case Management	5,273.1	117.28	5,387.7	106.18
Data Processing/MIS	469.2	10.43	521.5	10.28
Central Services	1,875.3	41.71	1,300.3	25.63
Professional and Outside	1,015.9	22.59	262.7	5.18
In-state Travel	100.0	2.23	157.9	3.11
Postage and Delivery	180.1	4.00	214.3	4.22
Telecommunications	118.7	2.64	172.4	3.40
Lease/rent - Land and Buildings	44.4	0.99	394.1	7.77
Lease/rent - Other	60.2	1.34	30.0	0.59
Utilities	16.7	0.37	115.5	2.28
Repair/maintenance	51.3	1.14	115.8	2.28
Operating Supplies	422.1	9.39	416.1	8.20
Printing	2.4	0.05	2.0	0.04

Table 6-9 (Concluded)

SUMMARY OF DES ADMINISTRATIVE COSTS
FOR SFY 91 AND SFY 92
(cost in thousands)

	SFY 91		SFY 92	
	cost	cost Per Member Per Month	Cost	cost Per Member Per Month
Insurance	$ 68.3	$ 1.52	$ 40.0	$ 0.79
Other	2,236.7	49.75	136.0	2.68
Total	$17,174.3	$381.97	$15,654.2	$308.52

Source: Arizona Department of Economic Security.

Table 6-10

QUARTERLY CASE MANAGEMENT EXPENSES FOR MR/DD ELIGIBLES SERVED BY DES

	Quarter Ending				
	9/30/91	12/31/91	3/31/92	6/30/92	9/30/92
Compensation	$1,12[illegible]0	$1,221,051	$1,2[illegible]0	$1,2[illegible]0	$1,132,986
Professional and Outside	7,027	53,222 327	43,730	39,417	13,224 172
In-state Travel					
Postage	1,476	4,031	5,357	5,324	6,735
Telecommunications	7,373	34,449	25,750	20,890	18,133
Lease/rental Land and Buildings	22,809	69,359	90,701	70,561	78,154
Lease/rental Other Equipment	463	1,650	1,589	1,077	748
Lease/rental All Other	0	14	0	12	0
Utilities	4,218	10,228	7,499	9,128	9,889
Repair/maintenance Non-contract	163	2,142	1,373	2,923	593
Repair/maintenance Contract	2,239	11,136	9,119	7,707	5,837
Operating Supplies	13	5,170	7,026	1,675	1,010
Supplies for Repair/maintenance	50	152	267 146	217	38
Printing		36		88	22
Miscellaneous Operating Expenses	106	3,010	467	624	120
Total	$1,175,993	$1,415,977	$1,422,705	$1,373,023	$1,267,661

Source: Arizona Department of Economic Security.

Table 6-11

DES QUARTERLY CASE MANAGEMENT COSTS PER FULL-TIME EQUIVALENT CASE MANAGER FOR ALTCS MR/DD ELIGIBLES

	Quarter Ending				
	9/30/91	12/31/91	3/31/92	6/30/92	9/30/92
Compensation	$6,078.34	$5,624.50	$6,078.50	$6,079.06	$5,693.40
Professional and Outside	0.00	1.63	0.00	0.00	0.86
In-state Travel	37.80	264.92	216.16	197.48	66.45
Postage	7.94	20.06	26.48	26.67	33.84
Telecommunications	39.66	171.47	127.29	104.66	91.12
Lease/rental Land and Buildings	122.70	345.24	448.35	353.51	392.73
Lease/rental Other Equipment	2.49	8.21	7.85	5.40	3.76
Lease/rental All Other	0.00	0.07	0.00	0.06	0.00
Utilities	22.69	50.91	37.07	45.73	49.69
Repair/maintenance Non-contract	0.88	10.66	6.79	14.64	2.98
Repair/maintenance Contract	12.04	55.43	45.08	38.61	29.33
Operating Supplies	0.50	25.73	34.73	8.39	5.08
Supplies for Repair/maintenance	0.07	0.76	0.72	1.09	0.19
Printing	0.27	0.18	1.32	0.44	0.11
Miscellaneous Operating Expenses	0.57	14.98	2.31	3.13	0.60
Total	$6,325.94	$7,048.17	$7,032.65	$6,878,.87	$6,370.16

Source: Arizona Department of Economic Security.

the same for quarterly case management costs per full-time equivalent case manager, as shown in Table 6-11.

Table 6-12 provides a comparison of the administrative costs per member per month of the ALTCS contractors in FY 89, FY 90, and FY 91. For all EPD contractors, case management costs increased by 7.3 percent from FY 89 to FY 90 and by 12.8 percent from FY 90 to FY 91. Other administrative costs increased by 5.7 percent from FY 89 to FY 90 and by 32.4 percent from FY 90 to FY 91. For all contractors combined, administrative costs increased by 6.2 percent from FY 89 to FY 90, and by 25.8 percent from FY 90 to FY 91.

For DES, the MR/DD contractor, administrative costs per member per month decreased from $750.69 in FY 89 to $499.50 and $361.89 in FY 90 and FY 91, respectively. Case management costs and other administrative costs exhibited a similar pattern.

Comoarison of ALTCS Administrative Costs with Those of Other Proarams

In this section we compare the administrative costs of the ALTCS program with the administrative costs experienced in other medical care programs. First, we compare ALTCS with the administrative costs for other state Medicaid programs and the prior county long-term care programs in Arizona before ALTCS. Next, we compare the ALTCS results with other demonstration programs.

The two components of ALTCS administrative costs are the costs of AHCCCSA and the costs of the long-term care contractors. On a per member per month basis, the administrative costs of AHCCCSA for the ALTCS program were $165.15, $119.65, and $87.22 for fiscal years 1989, 1990, and 1991, respectively (see Table 6-4). These costs are an average across all program eligibles and exclude PMMIS development costs. For long-term care contractors serving EPD eligibles, FY 91 administrative costs were $161.12 per member per month. Therefore, ALTCS administrative costs (including AHCCCS and contractor costs) for EPD eligibles in FY 91 are estimated at $248.34 per member per

Table 6-12

COMPARISON OF ADMINISTRATIVE COSTS PER MEMBER PER MONTH
FOR ALTCS CONTRACTORS FOR FY 89, FY 90 AND FY 91
(EPD contractors are presented in order of size)

	FY 89	FY 90	FY 91	FY 89-90 % Change	FY 90-91 % Change
Case Management Costs					
EPD Contractors	$ 40.08	$ 43.01	$ 48.50	7.3%	12.8%
Maricopa LTC	41.47	44.49	52.80	7.3	18.7
PHS	39.42	47.22	41.10	19.8	-13.0
VHS	36.00	32.11	40.51	-10.8	26.2
Pinal LTC	NA	NA	54.64	NA	NA
APIPA	NA	..... NA	49.35	NA	NA
CAP	42.11	122.46 50.19	45.20	19.2	- 9.9
MR/DD Contractor (DES)*	212.02		114.25	-42.2	- 6.7
Other Administrative Costs					
EPD Contractors	$ 80.50	$ 85.05	$112.62	5.7%	32.4%
Maricopa LTC	69.47	83.61	105.74	20.4	26.5
PHS	87.21	74.50	133.84	-14.6	79.7
VHS	107.94	103.83	116.27	- 3.8	12.0
Pinal LTC	NA	NA	81.32	NA	NA
APIPA	NA	NA	133.35	NA	NA
CAP	108.45	73.50	84.39	-32.2	14.8
MR/DD Contractor (DES)*	538.67	377.04	247.65	-30.0	-34.3

Table 6-12 (Concluded)

COMPARISON OF ADMINISTRATIVE COSTS PER MEMBER PER MONTH
FOR ALTCS CONTRACTORS FOR FY 89, FY 90 AND FY 91
(EPD contractors are presented in order of size)

	FY 89	FY 90	FY 91	FY 89-90 % Chanse	FY 90-91 % Change
Total Administrative Costs					
EPD Contractors	$120.58	$128.06	$161.12	6.2%	25.8%
Maricopa LTC	110.94	128.10	158.54	15.5	23.8
PHS	126.63	121.72	174.94	- 3.9	43.7
VHS	143.94	135.94	156.78	- 5.6	15.3
Pinal LTC	NA	NA	135.96	NA	NA
APIPA	NA	NA	182.70	-17.8	NA
CAP	150.56	123.69	129.59		4.8
MR/DD Contractor (DES)*	750.69	499.50	361.89	-33: 5	-27.5

Source: Quarterly Financial Reports submitted to AHCCCSA by the participating long-term care program contractors.

* Estimated from data reported for state fiscal year (SFY). DES costs for FY 89 = SFY 89 costs t SFY 90 costs * 0.25. DES costs for FY 90 = SFY 90 costs * 0.75 t SFY 91 costs * 0.25. DES costs for FY 91 = SFY 91 costs * 0.75 t SFY 92 costs * 0.25.

NA Data not available.

month. For the first two years of the program, FY 89 and FY 90, ALTCS administrative costs were estimated at $285.73 per member per month and $247.71 per member per month, respectively.

The medical services cost (i.e., medical service cost less patient share of cost) experienced by long-term care contractors for acute and long-term care services for EPD eligibles was $1,727.33 per member per month in FY 91. Thus, ALTCS administrative costs for EPD beneficiaries in FY 91 represented 14.4 percent of medical services cost and 12.6 percent of program costs (medical and administrative). For FY 89, the first year of the ALTCS program, administrative costs were 20.5 percent of medical services cost and 17.0 percent of program costs. Administrative costs in FY 90 were 16.6 percent of medical services cost and 14.2 percent of program costs.

For MR/DD eligibles in fiscal years 1989, 1990, and 1991, medical services costs per member per month were $1,939.30, $1,952.08, and $2,080.49, respectively. Administrative costs for MR/DD eligibles, including ALTCS administrative costs incurred by AHCCCSA, were $915.84, $619.15, and $449.11 for FY 89, FY 90, and FY 91, respectively. As a percent of medical services costs, administrative costs for MR/DD eligibles were 47.2 percent in FY 89, 31.7 percent in FY 90, and 21.6 percent in FY 91. As a percentage of program costs, MR/DD administrative costs were 32.1 percent, 24.1 percent, and 17.8 percent in fiscal years 1989, 1990, and 1991, respectively.

The overall cost of the county long-term care programs that were in existence before ALTCS was $70,394,293 in the year ended June 30, 1986, with medical cost of $66,615,568 and administrative cost of $3,778,725. Thus, administrative cost of the prior county long-term care programs was 5.4 percent of total expenditures and 5.7 percent of medical service costs.[35] It should be noted that the prior county long-term care programs were fully phased-in and differed in other ways from the ALTCS program.

In FY 91, all state Medicaid programs had state and local administrative costs of $3.52 billion and medical services costs of $88.38 billion. Thus, administrative costs represented 4.0 percent of medical services costs and

Table 6-13

COMPARISON OF ADMINISTRATIVE COSTS OF ALTCS, MEDICAID PROGRAMS, AND COUNTY LTC PROGRAMS

	Administrative Costs as a % of:	
	Total Costs*	Medical Service Costs
Medicaid Programs, FY 91	3.8%	4.0%
Prior County LTC Programs, 1987	5.4	5.7
ALTCS		
EPD Beneficiaries		
FY 89	17.0	20.5
FY 90	14.2	16.6
FY 91	12.6	14.4
MR/DD Beneficiaries		
FY 89	32.1	47.2
FY 90	24.1	31.7
FY 91	17.8	21.6

Source: HCFA-64 Reports, AHCCCS.

* Total costs for ALTCS equal administrative costs plus medical service costs minus patient share of cost.

3.8 percent of total costs. These figures include acute care and long-term care services. Table 6-13 summarizes the above information. Although the administrative percentage of costs of the ALTCS program are more than double the two comparisons given above, it should be remembered that neither of these comparison groups were capitated nor were they providing case management services. Consequently, their costs would be expected to be lower. In addition, the other state Medicaid programs comparison must be made with caution because the other Medicaid programs have been in existence for a long period of time, include both acute and long-term care services, and do not include administrative costs of providers.

In addition to the Arizona county LTC programs in existence prior to ALTCS and other state Medicaid programs, it is also relevant to compare the administrative costs of ALTCS with those of other medical care programs. In the first Implementation and Operation Report, we noted that the administrative costs of Health Maintenance Organizations (HMOs) with Medicare risk contracts ranged from 4.6 percent to 23.9 percent of total program costs, with most plans falling in the range from 11.1 percent to 13.8 percent.[36]

Table 6-14 compares ALTCS administrative costs as a percentage of program costs with those of the Channeling Demonstration project and the Social Health Maintenance Organization (S/HMO) plans. Program costs are medical service costs (minus patient share of cost) plus administrative costs.

The S/HMO demonstrations extend the typical benefit package offered by Medicare risk-based HMO contractors to include home and community-based and institutional chronic care services. The four S/HMO demonstration sites are: Elderplan (Metropolitan Jewish Geriatric Center, Brooklyn, New York); SCAN Health Plan (Senior Care Action Network, Long Beach, California); Seniors Plus (Ebeneter Society, Minneapolis, Minnesota); and Medicare Plus II (Kaiser Permanente, Northwest Region, Portland, Oregon).

The administrative cost percentage is shown in Table 6-14 for each year of the respective programs. For ALTCS, Year 1 is FY 89, Year 2 is FY 90, and

Table 6-14

COMPARISON OF ALTCS ADMINISTRATIVE COSTS WITH THOSE OF OTHER PROGRAMS BY PROGRAM YEAR

	Administrative Costs as a Percent of Proaram Costs*				
	Year 1	Year 2	Year 3	Year 4	Year 5
ALTCS	20.6%	17.0%	14.3%	NA	NA
EPD Beneficiaries	17.0	14.2	12.6	NA	NA
MR/DD Beneficiaries	32.1	24.1	17.8	NA	NA
Channeling Demonstration	49.6	25.8	NA	NA	NA
S/HMO Plans					
Elderplan (Brooklyn, NY)	60.5	30.4	28.2	15.9%	12.3%
SCAN Health Plan (Long Beach, CA)	53.4	33.1	26.7	23.8	24.6
Seniors Plus (Minneapolis, MN)	44.6	27.2	15.8	8.0	8.1
Medicare Plus 11 (Portland, OR)	4.2	5.1	5.2	4.5	3.6

Source: AHCCCS Administration; Craig Thornton, Joanna Will and Mark Davies, The Evaluation of the National Lona-Term Care Demonstration: Analysis of Channelina Project Costs, Technical Report TR-86B-04, Princeton, NJ: Mathematica Policy Research, May 1986; Charlene Harrington and Robert J. Newcomer, "Social Health Maintenance Organizations' Service Use and Costs, 1985-89," Health Care Financing Review, 12:37-52, Spring 1991.

* Program costs for ALTCS equal administrative costs plus medical service costs minus patient share of cost.

NA Not available.

Year 3 is FY 91. For the Channeling Demonstration, Year 1 is the period ending June 30, 1983, and Year 2 is the period ending June 30, 1984. For the S/HMO plans, Years 1, 2, 3, 4 and 5 correspond to calendar years 1985, 1986, 1987, 1988 and 1989, respectively.

The percent of total program spending devoted to administration is substantially smaller for ALTCS than for Channeling and most of the S/HMOs. In part, this may reflect the fact that Channeling and the S/HMOs managed a wide range of services for a largely non-institutional population. In addition, some of the S/HMOs incurred substantial marketing expenses. These types of expenses are not relevant for ALTCS contractors. The extremely small costs for Medicare Plus II may be due to the fact that it is part of a large, established HMO and used administrative resources from the existing organization.

As shown in Table 6-14, there were decreases in the administrative cost percentages for all programs from Year 1 to Year 2. For ALTCS EPD eligibles, there was a decline from 17.0 percent in the first year to 14.2 percent in the second year to 12.6 percent in the third year. For MR/DD eligibles, the administrative cost percentages were 32.1 percent, 24.1 percent, and 17.8 percent for Year 1, Year 2, and Year 3, respectively. For the Channeling and S/HMO plans, however, there were more substantial declines from Year 1 to Year 2. There were also continued decreases in the administrative cost percentage for most of the S/HMO plans in Years 3, 4 and 5.

To summarize, ALTCS administrative costs for EPD eligibles, as a percentage of program costs, were 17.0 percent in the first year, 14.2 percent in the second year, and 12.6 percent in the third year of the program. For MR/DD eligibles, administrative costs were 32.1 percent, 24.1 percent, and 17.8 percent in the first three program years. For all ALTCS eligibles (EPD and MR/DD), administrative costs as a percentage of program costs were 20.6 percent, 17.0 percent, and 14.3 percent for fiscal years 1989, 1990, and 1991, respectively. These administrative cost percentages are higher than other state Medicaid programs and the prior county-based long-term care programs in

Arizona. However, they are generally lower than the administrative cost percentages for the Channeling Demonstration and the S/HMO plans.

Case management is one of the largest components of administrative cost for ALTCS program contractors. It is also one of the key innovative features of the program. We compared case management costs of the ALTCS contractors with those experienced in the Channeling Demonstration and S/HMO programs. Table 6-15 presents the case management costs per member per month in the ALTCS program and in these other programs. The case management costs include baseline assessments, initial care plans, and ongoing case management services. All costs are adjusted to 1989 dollars using the medical care services component of the Consumer Price Index (CPI).

As shown in Table 6-15, case management costs for ALTCS EPD contractors averaged $40.08 per member per month in Year 1 (FY 89), $40.12 per member per month in Year 2 (FY 90), and $40.79 in Year 3 (FY 91). Three of the contractors, Maricopa LTC, PHS and CAP, had increases in case management costs from the first year to the second year. VHS experienced a decrease from $36.00 to $29.39 per member per month from Year 1 to Year 2. Two contractors, PHS and CAP, had smaller case management costs in Year 3 than in Year 2.

For ALTCS MR/DD eligibles, DES case management costs were $212.02 in Year 1, $112.07 in Year 2, and $96.11 in Year 3. For each year, the MR/DD case management costs were substantially greater than those for the EPD contractors and the comparison programs. Because approximately 95 percent of MR/DD eligibles were users of home and community based (HCB) services, it would be expected that they would have larger case management costs than a group with a larger percentage of institutionalized patients.

For the Channeling Demonstration, case management costs per member per month were $107.47 in Year 1 and $68.06 in Year 2. These costs are significantly larger than the ALTCS EPD case management costs. This result may be due to the fact that most Channeling patients received intensive case management services for HCB care, whereas a smaller proportion of ALTCS EPD eligibles were users of HCB services.

Table 6-15

COMPARISON OF ALTCS CASE MANAGEMENT COSTS PER MEMBER PER MONTH WITH THOSE OF OTHER PROGRAMS BY PROGRAM YEAR
(EPD contractors are presented in order of size)
(All years are in 1989 dollars*)

	Year 1	Year 2	Year 3	Year 4	Year 5
ALTCS	$ 81.12	$ 60.16	$58.68	NA	NA
EPD Contractors	40.08	40.12	40.79	NA	NA
Maricopa LTC	41.47	42.03	44.40	NA	NA
PHS	39.42	43.21	34.57	NA	NA
VHS	36.00	29.39	34.07	NA	NA
Pinal LTC	NA	NA	45.95	NA	NA
APIPA	NA	NA	41.50	NA	NA
CAP	212.02 42.10	45.93	38.01	NA	NA
MR/DD Contractor (DES)		112.07	96.11	NA	NA
Channeling Demonstration	107.47	68.06	NA	NA	NA
S/HMOs	29.56	11.87	10.83	$ 8.66	$ 8.04
Elderplan	31.45	12.12	7.86	6.64	6.36
Seniors Plus	51.65	11.10	9.53	7.39	6.94
SCAN Health Plan	29.20	18.77	18.44	12.70	11.39
Medicare Plus II	5.92	5.50	7.47	7.89	7.47

Source: Craig Thornton, Joanna Will and Mark Davies, The Evaluation of the National Lons-Term Care Demonstration: Analysis of Channeling Project Costs, Technical Report TR-86B-04, Princeton, NJ: Mathematica Policy Research, May 1986; Charlene Harrington and Robert J. Newcomer, "Social Health Maintenance Organizations' Service Use and Costs, 1985-89," Health Care Financing Review, 12:37-52, Spring 1991.

* Converted to 1989 dollars using the annual averages of the medical care services component of the consumer price index for all urban consumers, U.S. city average. (1985 = 113.2, 1986 = 121.9, 1987 = 130.0, 1988 = 138.3, 1989 = 148.9, 1990 = 162.7, 1991 = 177.0). Source: U.S. Bureau of Labor Statistics.

NA Not available.

Over the five years of the S/HMO demonstration, the average case management cost per member per month declined from $29.56 in Year 1 to $11.87, $10.83, $8.66 and $8.04 in the succeeding four years. The results, however, varied by plan. One of the S/HMO plans in Year 1 had larger per member per month case management costs than the ALTCS EPD contractors. Two of the other S/HMOs had case management costs about 25 percent less than ALTCS. In Year 2 all of the S/HMO plans had smaller per member per month case management costs than did the ALTCS EPD contractors.

Overall, the S/HMO case management costs were significantly lower than the ALTCS results. This result is obviously affected by the fact that all ALTCS enrollees are case managed while less than 20 percent of the enrollees in the S/HMOs actually receive case management services. If all the S/HMO enrollees received case management services, their costs per member per month would likely be higher.

Both the Channeling Demonstration and S/HMO plans experienced substantial reductions in their case management costs per member per month from Year 1 to Year 2. The Channeling costs declined by 36 percent, Elderplan had a reduction of 61 percent, Seniors Plus reduced costs 78 percent, SCAN had a 36 percent reduction, and Medicare Plus II's costs declined by 7 percent.

For ALTCS, only VHS had a decrease in case management cost per member per month from Year 1 to Year 2, while PHS and CAP had decreases from Year 2 to Year 3. For the plans that had reductions in case management costs, it may be that their costs of providing case management services declined as case managers gained experience with their client base. It is also likely that the other results (lack of significant reductions in case management costs during the first three years of the program) were because the two largest ALTCS contractors, Maricopa LTC and PHS, had prior long-term care programs that had been in existence for many years before ALTCS started.

Policy Implications

This chapter has examined the administrative costs of the ALTCS program for the first three years of the program, FY 89, FY 90, and FY 91. Although the data are preliminary and reflect only the initial experience of the program, our findings do raise a number of policy issues that need to be addressed by other states considering implementation of long-term care programs similar to ALTCS. First, we consider the level and trend in ALTCS administrative costs. Next, we address case management and other factors which make up administrative costs in an ALTCS-type program.

For EPD eligibles, the administrative costs of the ALTCS program, as a percent of total program costs, were 17.0 percent in FY 89, 14.2 percent in FY 90, and 12.6 percent in FY 91. MR/DD administrative costs, as a percent of total program costs, were 32.1 percent, 24.1 percent, and 17.8 percent for fiscal years 1989, 1990, and 1991, respectively. For the first three years of the program, ALTCS had larger administrative costs (as a percent of program costs) than other state Medicaid programs and the county long-term care programs in Arizona prior to ALTCS. On the other hand, ALTCS bad lower administrative costs than selected LTC demonstration projects.

The ALTCS program has a number of features that result in higher administrative costs compared to a traditional Medicaid program. These include preadmission screening, case management, use of contractors, and competitive bidding/selective contracting. Although administrative costs may be greater in a program with these features, they may effectively reduce medical services costs. In addition, it is hoped that these features will result in long-term cost containment and overall cost savings (smaller program costs, even though administrative costs are greater). Other states must consider the trade-offs between the costs incurred for these features and the potential savings that could be derived from them.

With respect to the trend in administrative costs, as a proportion of program costs, ALTCS administrative costs for both EPD and MR/DD eligibles decreased over the first three years of the program. The trend in ALTCS

administrative costs is consistent with some other LTC programs. The decrease in administrative costs probably results from: 1) larger initial start-up costs in Year 1, 2) greater efficiency in performing administrative tasks over time, and 3) the ability to spread administrative costs over a larger number of eligibles in Year 2 and Year 3. Other states should expect larger administrative costs in the first year of a new program than in succeeding program years.

Expenditures on case management are an important component of administrative costs in an ALTCS-type program. Approximately one-third of the administrative costs incurred by the EPD program contractors is for case management ($40.08 per member per month in Year 1, $43.01 per member per month in Year 2, and $48.50 per member per month in Year 3). For MR/DD eligibles, DES incurred case management costs of $212.02 per member per month in Year 1, $122.46 per member per month in Year 2, and $114.25 per member per month in Year 3. Part of these larger costs for MR/DD beneficiaries may be due to the larger percentage of HCB clients. According to AHCCCS, case manager-to-client ratios are approximately twice as high for HCBS clients as for nursing home clients. This may account for part of the larger case management costs for MR/DD beneficiaries, but it is unlikely that it accounts for all of it.

These figures for ALTCS are larger than the case management costs in the S/HMO program. However, the S/HMOs do not provide case management services to all their enrollees as does ALTCS. Case managers are responsible for making sure that the client is served in the most cost-effective manner. Large case management costs by themselves are not necessarily a negative reflection on a long-term care program. If additional expenditures on case management result in decreases in medical service costs, then these expenditures may be warranted. Case management costs per enrollee may be larger for those individuals enrolled in HCB services for which scheduling and managing service delivery can be a time consuming process. States will need to consider the expected distribution of enrollees between HCB services and institutional care in estimating case management costs and will need to weigh the costs of expenditures on case management against the potential reductions in medical service costs.

Other important components of administrative costs relate to eligibility determination and MIS functions. Arizona uses a preadmission screening instrument to target ALTCS to those most in need of long-term care services. States need to determine the appropriate screening process for their populations. The length of the instrument, the frequency of reevaluations, the training of the persons performing the screen, and the size of the team doing the screen will each impact on the administrative costs of this aspect of the program. Other states considering implementing a long-term care program similar to ALTCS will also need to consider the features of the MIS that will be needed to effectively manage the program. A capitated program needs to be especially concerned with having information available to manage the program, including data to permit monitoring for underprovision of services. Thus, states will need to budget administrative costs accordingly.

The use of program contractors may lead to increased administrative costs. The current structure of the ALTCS program results in some duplication of effort between contractors and AHCCCSA which may result in greater overall administrative costs than would occur in the absence of such duplication. For example, although AHCCCSA is responsible for applying the PAS to all eligibles, a number of contractors initially performed their own evaluation on the client at the time of enrollment using either their own assessment instrument or the PAS (most, if not all, contractors now accept the ALTCS PAS assessors level of care determination). Because there can be changes in client functional status that occur from the time the PAS is applied by AHCCCSA until the client is enrolled with a contractor, some duplication of this type of effort is warranted. However, some may result in greater administrative costs without any further benefit.

The method of paying contractors for administrative costs is another issue that should be examined by states considering an ALTCS-type program. ALTCS program contractors were reimbursed for the costs of case management and other administrative services. In Year 1 contractors were paid $2.00 per enrollee per day for case management services. This amount was increased by 7.6 percent in Year 2 and by 11.5 percent in Year 3. Other administrative costs of contractors were reimbursed as a percentage of the monthly capitation

payment for long-term care services plus case management. In Years 1 and 2 the county-based contractors were allowed six percent for other administrative costs. The allowance was increased to eight percent in Year 3 and decreased to 5 percent in Year 4. AHCCCSA negotiated a percentage with the private contractors that included an allowance for contingencies, profit and contribution to reserves. This method does not create strong incentives for contractors to limit spending on administrative costs. States need to explore payment options for administrative costs that provide the desired incentives, are reasonable, do not appear arbitrary, and are appropriate for effective program management. An alternative method would be to develop a fixed capitation rate including both medical and administrative costs, without a separate breakout of administrative costs. This would permit and encourage each long-term care contractor to tradeoff administrative costs versus medical service costs in a manner that maximizes cost efficiency.

States should also devise some means of assessing the effectiveness of program administration to estimate the appropriate level of administrative spending in their programs. To enable monitoring by the state, it is necessary to define administrative cost categories that are relevant for program management and that are consistent over time and across contractors. For an ALTCS-type program, these categories might include case management, MIS/data processing, utilization review/quality assurance (UR/QA), occupancy expenses, management fees, and general administration.

7. INFORMATION SYSTEMS

Introduction

In the first half of 1991, the Arizona Health Care Cost Containment System Administration (AHCCCSA) implemented its Prepaid Medical Management Information System (PMMIS), after a five year development effort. Prior to the implementation of this new system, AHCCCSA had been using a Medicaid Management Information System (MMIS) which was originally designed to support a fee-for-service Medicaid program. As such, the system never fully met the unique needs of a prepaid program, even after extensive modification.

The PMMIS consists of 11 subsystems. The Provider Subsystem maintains current and historical information on AHCCCS/Arizona Long-Term Care System (ALTCS) program providers, including authorized services, payment methodology, demographic information, license information, service capacity, and facility characteristics. The Recipient Subsystem maintains current and historical information on AHCCCS/ALTCS members, and processes eligibility and enrollment transactions. The Reference Subsystem maintains data for validating transactions such as provider and member eligibility, claims and encounters, and capitation payments. The Encounter/Claims Subsystem processes encounter data and fee-for-service claims. The Health Plan Subsystem maintains information on plan ownership, financial condition, service network, enrollment and capacity, and contract data, as well as computing and maintaining capitation payment information. The Financial Subsystem supports financial reporting, budget preparation, general ledger,- accounts receivable and payable, governmental accounting, purchasing, and inventory management. The Case Management Subsystem tracks correspondence, inquiries, problems, or other cases requiring attention or follow-up. The Information Management Subsystem produces reports on overall program financial and operational status, including required federal, state, and county reports. The Utilization

Review/Quality Assurance (UR/QA) Subsystem produces utilization reports, including profiles for individual providers and members.

The Long-Term Care Eligibility Determination System (LEDS) establishes control of the ALTCS eligibility application process, captures application data, determines financial eligibility, and manages ongoing maintenance of the eligibility data. The Client Assessment and Tracking System (CATS) primarily supports the medical/functional eligibility screening process and the case management activity.

For a detailed description of the functional capabilities of the PMMIS, the reader is referred to the First Implementation and Operation Report.

This chapter describes recent activities in the development and operation of the PMMIS. It is organized into two main sections: major evaluation issues and findings, and policy implications. The first section on major evaluation issues and findings describes the final implementation of the PMMIS as well as ongoing efforts to maintain and enhance the system. Next, a brief summary is given of user perceptions of the new system. The following section discusses the use of PMMIS management reports. After that, the implementation and operational costs of the PMMIS are summarized. Next, the tangible, or financial, benefits of the new system are discussed, followed by an analysis of the cost effectiveness of the PMMIS.

The data sources for this chapter include documentation on the PMMIS, discussions with AHCCCSA staff (primarily at the assistant director and manager level), discussions with health plan staff (primarily managers in MIS, provider/member services, and claims/encounter), Health Care Financing Administration (HCFA)-64 reports and supporting cost detail, and HCFA-2082 reports.

Major Evaluation Issues and Findinas

PMMIS Implementation and Ongoing Development

Planning, design, development, and implementation of the PMMIS began in 1984 and continued over the next seven years until final installation in mid-1991. The project experienced a number of delays and cost increases over the years. Details of the PMMIS efforts through June 1991 are found in the First and Second Implementation and Operation Reports.

The final conversion and implementation of the PMMIS was organized into two phases. Phase I included the five "core" subsystems: Recipient, Health Plan, Provider, Reference, and Encounter/Claims. This phase began in November of 1990 and ended in April of 1991 after the conversion of claims and encounter history files and the start of encounter/claims processing. The last run of the old MMIS was on February 26, 1991. Phase II included implementation of the Case Management Subsystem, the UR/QA Subsystem, and the Information Management Subsystem, and was completed in June of 1991.

In December 1991, HCFA sent a certification team to review the PMMIS in relation to standards established for an approved MMIS. HCFA's certification requirements were modified substantially to account for the prepaid components of the PMMIS. The PMMIS was found to meet the criteria and was certified to be eligible for 75 percent Federal Financial Participation, as compared to 50 percent funding for a non-certified system. Certification was retroactive to April 1, 1991. The 75 percent funding of the Case Management Subsystem was limited to those functions specific to the handling of third party liability (TPL) and catastrophic cases. LEDS/CATS also continued to receive the regular 50 percent administrative rate because it was determined to be an eligibility determination system as specified under 42 CFR 433.112 (c).

In its letter of January 14, 1992 summarizing the certification finding, HCFA was complimentary of the PMMIS development effort:

"Please also express to the State our congratulations and appreciation for a job well done. The project undertaken by the State in developing and successfully implementing their PMMIS was an extremely complex undertaking not only because the major health care delivery mechanism was a prepaid process, but also because the State successfully utilized the latest automated data processing (ADP) design technology, that of relational data base. This combination of tasks was an extremely ambitious undertaking, since the change in ADP design technology alone requires the user to totally change their internal ADP 'way of life' and organization to accommodate the new technology. The State of Arizona has achieved a national 'first' in the MMIS arena by being the first State to successfully implement an automated system primarily designed to support a prepaid health care delivery system, and by also being the first State to employ the relational data base technology in implementing an MMIS."

AHCCCSA has continued its development effort after completing the initial implementation of the PMMIS in the spring of 1991. Development has included both enhancements to the system's functionality as well as ongoing maintenance to keep the system up to date with the ever-changing program.

AHCCCSA utilizes a software release concept which groups various changes to the system to be implemented together in a new release every 90 days. Occasionally, other emergency changes may also be implemented apart from the 90 day release schedule. PMMIS ongoing development is classified into three major categories: corrective; improvement (e.g., to improve performance); and enhancements. Enhancements are further divided into major enhancements (projects expected to require at least 1000 hours of effort) and operational enhancements.

Most of the work in the first quarter after initial implementation (April-June, 1991) was aimed at stabilizing the new PMMIS environment, fixing problems etc. The development work for Fiscal Year (FY) 92 is summarized in the AHCCCS Automation Plan. Some of the projects have included: implementation of the Seriously Mentally Ill (SMI) program; changes in the

Newborn process; implementation of an end-of-year contract process for recipients changing plans; implementation of Mental Health Services for non-SMI children; implementation of an Electronic Verification System allowing AHCCCS providers to make direct inquiries regarding member eligibility; development of a capability for the Arizona Department of Health Services to match Children's Rehabilitation Services clients against the PMMIS database; and changes to the preadmission screening (PAS) instrument.

AHCCCSA officials acknowledge that the resources required to maintain the system are considerably greater than originally anticipated. As of December 1992, there were 99 full-time equivalent (FTE) positions (of which 10 percent were vacant) and 36 consultants maintaining the system. They do not anticipate any significant reduction in these resources; in fact, since they expect the backlog of requested projects to grow, it is possible that the staff requirements could also grow in the future.

AHCCCSA officials mention several factors as contributing to the increased resource requirements to maintain the PMMIS. First, the new system is significantly larger and more complex than the old, capturing many times as much data. Also, because the new system may be modified more easily and in a more timely manner, this has led to an increase in the number of changes requested. AHCCCSA officials also believe that the pace of changes in the AHCCCS program is increasing (e.g., with the addition of programs such as Mental Health), leading to more requirements to modify and enhance the system. They also believe that the addition of population groups and the increase in the number of recipients drives maintenance requirements, as there are more ways that users want to look at the data, more user groups, and more interaction with other state agencies.

User Perceptions of PMMIS

In this section, we discuss briefly how the new system is perceived by the PMMIS users. Several of the issues mentioned here are discussed in greater detail later in this chapter.

AHCCCSA staff are very happy with the new system. They indicate that the data contained in the system is much more complete, reliable, and accessible compared to the old system. The system stores considerably more information about AHCCCS members, providers, health plans, and claims. The relational database technology results in the data being better defined, internally consistent, and centralized in one integrated database rather than being spread across numerous files.

AHCCCS users are delighted with the increased accessibility of the data. Much more information is available on-line, making research and resolution of every day issues more effective, productive, and less frustrating. PMMIS reports get generally high marks, especially the capability to satisfy ad hoc reporting requests within a few days.

The system is viewed as being more flexible and user friendly. Many hard to read codes have been replaced by English language descriptions on screens and reports. The system makes it easy for users to navigate through various on-line applications.

The Information Resources Management Division (IRMD) finds that the new technology greatly facilitates the ongoing maintenance and enhancement of the system. The system can be easily changed, and much more quickly than in the old system. For example, it is estimated that the time required to add a new eligibility rate code category has been reduced from about four to five months in the old system to about two weeks in the PMMIS. Users are more confident that required changes can be implemented and that they can be done correctly and on time. The system is well integrated in contrast to the old MMIS that had been extensively patched over the years. The PMMIS is much better documented than the old system, and the development of the PMMIS forced AHCCCS users to define clear business rules for the various processes. The new system has also greatly reduced the many production problems which occurred in the old system.

AHCCCSA officials indicate that the PMMIS has been a significant boost to staff morale, by reducing some of the tedious manual work, providing more

accurate and reliable information, being more user friendly, and greatly reducing the amount of time employees need to spend dealing with system problems. As an example, in the Member File Integrity Section (MFIS), there were typically 5 to 10 special projects per year to deal with problems in the old system, e.g., to fix duplicate membership records manually. Employees are no longer burdened with these types of tasks; most of the time problems that do occur can be fixed systematically without much manual effort.

The new Recipient Subsystem has received very favorable reviews. For the first time, capitation and membership rosters are tied directly together, greatly simplifying reconciliation efforts. The new member records provide AHCCCSA and plan users with more information than before, including share of cost history, insurance carrier information, and linking of members with different identification numbers. Users like the fact that they get a complete enrollment history for any individual. The new system is also much more effective in identifying duplicate enrollment records at the time new members are enrolled. In general, the new system has much better editing processes, so that most problems can be caught before data gets into the system. The old system did not have stringent up-front editing, so that problems had to be resolved after-the-fact in the monthly reconciliations.

The Claims/Encounter Subsystem is also seen as an improvement over the old system. On-line inquiry capabilities for claims and encounters are much better. Pended fee-for-service claims can be resolved on-line. Problems can be researched more easily and resolved on a more timely basis. Mass adjustments to claims or encounters are handled with much greater ease. With the old system, it was necessary to develop special programs for mass adjustments whereas now the process is much streamlined.

The medical claims adjudication staff "can't imagine living without" the PMMIS. In addition to on-line access to claim information, they are supported by an image processing system which gives them instant access to the original hard copy claim. Additionally, claims have already been thoroughly edited before the adjudicators see them. Consequently, their review and adjudication can be handled as a "one-stop" process.

The new prior authorization system has been well received by AHCCCSA staff. There is now a complete history of previous prior authorizations, and it is easier to access history. This facilitates better coordination with concurrent reviewers. In addition, it is easier to track changes in prior authorizations.

Users perceive the new UR/QA Subsystem to be more flexible and effective than the old. The new system relies more on smaller, more frequent, more focused utilization reports rather than the massive quarterly runs in the old MMIS. Requested information can be obtained within a couple of days, and cases can be more readily researched on-line.

The new Case Management Subsystem is also given very high marks by AHCCCSA users. The system allows staff to track cases, correspondence and enter narratives on case status.

There are a few areas where users feel the system's capabilities and performance could be improved. Users feel that the edits in the Recipient Subsystem could be fine-tuned to eliminate some rejects which do not really require any action. There are some gaps in management reporting, as will be discussed in the next section, which leads to manual effort to compile the needed information. Some users would feel that more summary level reports would be useful, and others would like the system to provide more in the way of data extracts that users can manipulate on their own.

There was some concern expressed about system performance, particularly during month-end processing. Occasionally, the system is not available at month-end, and sometimes on-line response time can be very slow (up to a couple of minutes). Apparently, AHCCCS response time was degraded when the Department of Administration moved other users onto the same computer as the PMMIS. AHCCCSA is working with the DOA to try to improve performance. While AHCCCSA has limited control over the hardware, there are apparently some improvements that it expects to make.

The health plans also give very favorable ratings for the PMMIS, particularly the Recipient Subsystem. Typical comments from the plans about the PMMIS are: "excellent", "definitely an improvement", *'remarkable improvement.' The plans especially like the integration of enrollment data and capitation data in the Recipient Subsystem. In general, they find that the system provides more extensive, more reliable, and more timely membership information, and that there are better audit trails and tracking capabilities for resolving problems. The improved member information also means that the plans are able to get more timely and responsive assistance from the Communication Unit at AHCCCS.

A couple of plans indicate that they feel there is still some room for improvement in the month-end enrollment process. The concerns relate to the fact that the last daily enrollment updates are merged with the month-end reconciliation, creating some difficulties for the plans. Concern is also expressed about the timeliness of receiving the plans' rosters at the end of the month. Some plans also complain about having to pay a third party vendor to obtain eligibility data; they feel that the information should be provided directly on-line at no cost to the plans.

Most plans generally feel that the PMMIS encounter/claims process is also an improvement over the old system. The editing process has been improved so that edits are more rational and therefore easier to enforce. The plans also like the fact that there is now a single pend cycle, rather than having encounters pend on several occasions due to piece-meal application of the edits.

Some of the plans would like to see encounter/claims processing enhanced further to allow on-line submission of reinsurance and deferred liability claims, on-line correction of encounters, and the ability to revise encounters which have already been accepted by AHCCCSA.

Most of the plans indicate that they would like to receive summary information from the PMMIS, particularly reports comparing utilization by

county and plan. AHCCCSA has indicated that it plans to develop such comparative utilization data for the plans during 1993.

The plans find that reference tables provided by the PMMIS are very useful. There was some concern expressed, however, that the reference tables in the system could be updated in a more timely manner.

Finally, many of the plans are very complimentary of AHCCCSA efforts to improve communication with the plans regarding the system. They indicate that the interaction with AHCCCSA staff has improved tremendously over the past year, and that the AHCCCSA staff is committed to working out problems with the plans and seeking plan input on system changes.

In addition to internal AHCCCSA users and health plan users, outside organizations constitute a third class of users of the PMMIS. This might include other government branches or agencies, evaluation contractors like LRA, or other private organizations.

Outside users that request information in the form of summaries or reports probably find the PMMIS to be quite responsive provided that their requests are supported by AHCCCSA on a timely basis. The same ad hoc reporting capabilities that AHCCCSA internal users find invaluable are used to support external requests, e.g., from the legislature or the governor's office.

More difficulty has been experienced by outside organizations that desire extracts of raw data for their own manipulation. For a user not familiar with the data structures of the PMMIS relational database, extracting data from the system is more challenging than in a traditional MMIS. Efforts by this evaluator to define data transfers needed for the evaluation have been slowed by the size and complexity of the system, and the multitude of different data elements.

This process has been further hindered by the lack of access to complete and current documentation on the data elements and their values. The AHCCCS

data processing department does not maintain central, comprehensive, and current file documentation. Although there was an early effort to create a data dictionary, it was never completed and has been abandoned. Each subsystem programmers' group maintains its own file documentation. Thus the level and quality of documentation varies greatly among subsystems. The Recipient Subsystem group maintains good written documentation, whereas the Encounter/claims group has very limited documentation on the meanings, relationships, and values of the data elements.

The incomplete and sometimes misleading documentation that does exist is problematic for outside users. It requires extensive interviews and repeated contacts with AHCCCSA programmers to obtain proper knowledge of the files. This contrasts sharply with some other Medicaid data processing facilities, such as Electronic Data Systems or First Health Services (the contractor for New Mexico). The high quality of current and comprehensive file documentation from such contractors greatly simplifies the work for outside entities utilizing their data.

PMMIS Manaaement Reports

There are several hundred reports produced by the PMMIS. These reports generally fall into four categories. First, the vast majority of reports are detail reports to support day-to-day program operations. The second category of reports consists of control reports used for ensuring that the system is operating properly and capturing all records. The third category includes summary-level reports run frequently (e.g., daily) and used for monitoring the day-to-day operation by supervisors or lower-level management personnel.

Finally, the last category of reports consists of summary-level management information reports. These reports contain data aggregated by various categories of interest to management, and typically run at a monthly or less frequent interval. Of the several hundred PMMIS reports, a relatively small fraction (fewer than 100) can be characterized as providing management-level information.

The management information reports can be divided into the following categories: Eligibility, Enrollment, Capitation, Encounter/Claims, Utilization, Case Management, Miscellaneous, HCFA reports, and Long-term Care reports. The various reports in these categories were described in the Second Implementation and Operation Report. In this section, we comment briefly on the AHCCCSA users' perceptions of the PMMIS management reports, based on interviews with about a dozen report users.

Most of the management reports described in the Second Implementation and Operation Report are in fact being used by AHCCCSA management. Examples of the ways the information is being used include:

- Planning and Budgeting: e.g., monitoring growth in the different programs; projecting staff workloads; estimating the impact of changes in the program;
- Supporting Policy Decisions: e.g., using cost analysis summaries to evaluate whether to capitate ventilator-dependent members;
- Monitoring Employee Performance: e.g., evaluating productivity; identifying unusual trends in "recipient problem cases" by initiator;
- Monitoring trends in encounter submissions; identifying encounter submission problems, e.g., common edit failures;
- Identifying problems with provider claims billing practices;
- Monitoring timeliness in claims processing;
- Monitoring timeliness in resolving pended encounters.

User comments indicate that the PMMIS management reports are timely and useful. Users also believe that the information is accurate and reliable. This is in contrast to largely negative comments regarding the management reports in the old MMIS.

However, for a system as large and expensive as the PMMIS, it would appear that the system could offer considerably more in terms of management reports. The Second Implementation and Operation Report suggested several major categories where additional reports would be helpful: overall program

planning, open enrollment, fee-for-service window, encounter/claims productivity and timeliness, quantity and quality of encounter data, processing accuracy, access to care/provider network, rate setting, ALTCS services, case management, third party liability, member services workload, grievances and appeals, and computer performance.

Discussions with users confirmed some of these gaps in management reporting. In one area, the major management monitoring reports are being produced on a personal computer based on manual logs kept by staff members. In a second area, the staff must manually combine the results of about 60 reports to produce the desired management information. AHCCCSA top management also recognizes that better information report mechanisms would be desirable for top-level program monitoring. The 1993 budget includes funds to develop an "executive information system," which would involve downloading certain summary information to a PC environment so that AHCCCSA officials can easily do queries.

In general, AHCCCSA users are pleased with the regular PMMIS management reports, but they do not appear to be especially enthusiastic about this aspect of the system. In contrast, users are genuinely enthusiastic about the PMMIS ad hoc reporting capabilities, which are described as "terrific" and "excellent." In the old MMIS, the process of getting information from the system could be lengthy and complicated, especially if the request involved extracting information from more than one file. Now, users indicate that ad hoc reports can often be generated the same day as the request. Typical turnaround indicated by internal AHCCCSA users is 3 to 4 days; requests rarely take more than a week.

The users feel that ad hoc reporting helps considerably in research and decision-making. Examples include projecting how many members would be impacted by a proposed policy change, or estimating the impact of a mass adjustment (e.g., a retroactive coding change for claims) before actually implementing it. The structure of the system makes it easy to search the database by a variety of user-selected keys.

The organization provides good support for ad hoc reporting. There are two programmers dedicated to producing ad hoc reports (down from four when the system was first implemented). In addition, the System Control Unit (SCU) provides the equivalent of two to three people to assist users in specifying ad hoc reports and to write the System Service Requests (SSR) which formalize the ad hoc request.

Currently, about 20 to 30 ad hoc requests are handled each month. When the system was first implemented, the number was 80 to 100 per month. Many of the early requests were ultimately put into regular production.

Some users are more active in generating their own management information from the system. In one case, PMMIS data is downloaded to a personal computer, and the PC data is manipulated by the user for special analyses. In another case, extract files are created for a user, who uses report-generation software to produce reports directly from the mainframe. AHCCCSA management hopes that eventually users will have more tools to perform their own information queries. This could involve providing more extract files directly to users, or creating "snapshot" files of the most current data and giving users reporting and query capabilities to manipulate this data.

PMMIS Costs

PMMIS Development Costs

The budget for the design, development, and implementation of the PMMIS increased several times since the inception of the project. The First Implementation/Operation Report provided a history of the changes in estimated cost and discussed some of the reasons behind those changes. In this section, we summarize the final project costs, as claimed in reimbursement requests to HCFA. These figures reflect final AHCCCSA adjustments to claimed costs which occurred subsequent to the publication of the Second Implementation and Operation Report, which summarized implementation costs through June 30, 1991 as of that time. As a result of these adjustments, approximately $2.5 million

in claimed costs were reclassified from implementation costs to operating costs. Therefore, the implementation costs reported here are about $2.5 million lower than reported in the Second Implementation and Operation Report.

Table 7-l and Figure 7-l show the final PMMIS design, development, and implementation costs for the project, broken down by costs for independent contractors and in-house costs, Table 7-l shows the cost for each fiscal year, and Figure 7-l shows the cumulative cost for the project over time. The costs shown are "Total Computable Costs," or those costs claimed by AHCCCSA for 90 percent funding on form HCFA-64, after "dilution" to account for costs associated with non-federal eligibles.

As Table 7-l indicates, AHCCCSA's cumulative claimed costs for the project were approximately $30 million. Most of these costs were incurred in FY 88 through FY 91, with over half of the total being spent in FY 90 and FY 91. Approximately three-fourths of the costs were for independent contractors while one-fourth was for in-house AHCCCSA and Department of Administration (computer) costs.

PMMIS Ooerational Costs

This section summarizes PMMIS operational costs for the first five quarters of operation, through June 30, 1992. This was the most current operational cost data available at the time the analysis was performed. For this time period, AHCCCSA claimed $20,505,000 "Total Computable" operational costs eligible for 75% federal funding. The principle source of these cost data is the HCFA-64.10 report, Line 4: Costs for Operation of Approved MMIS. In the following tables and figures, these costs will be compared to AHCCCS MMIS costs prior to the PMMIS implementation, and to MMIS costs in other states. However, the reader is cautioned that these costs represent the majority, but not all, of the PMMIS operational costs. First, the Total Computable costs have been diluted to exclude costs of state-only eligibles. Second, some significant portions of the PMMIS (e.g., parts of the Case

Table 7-1

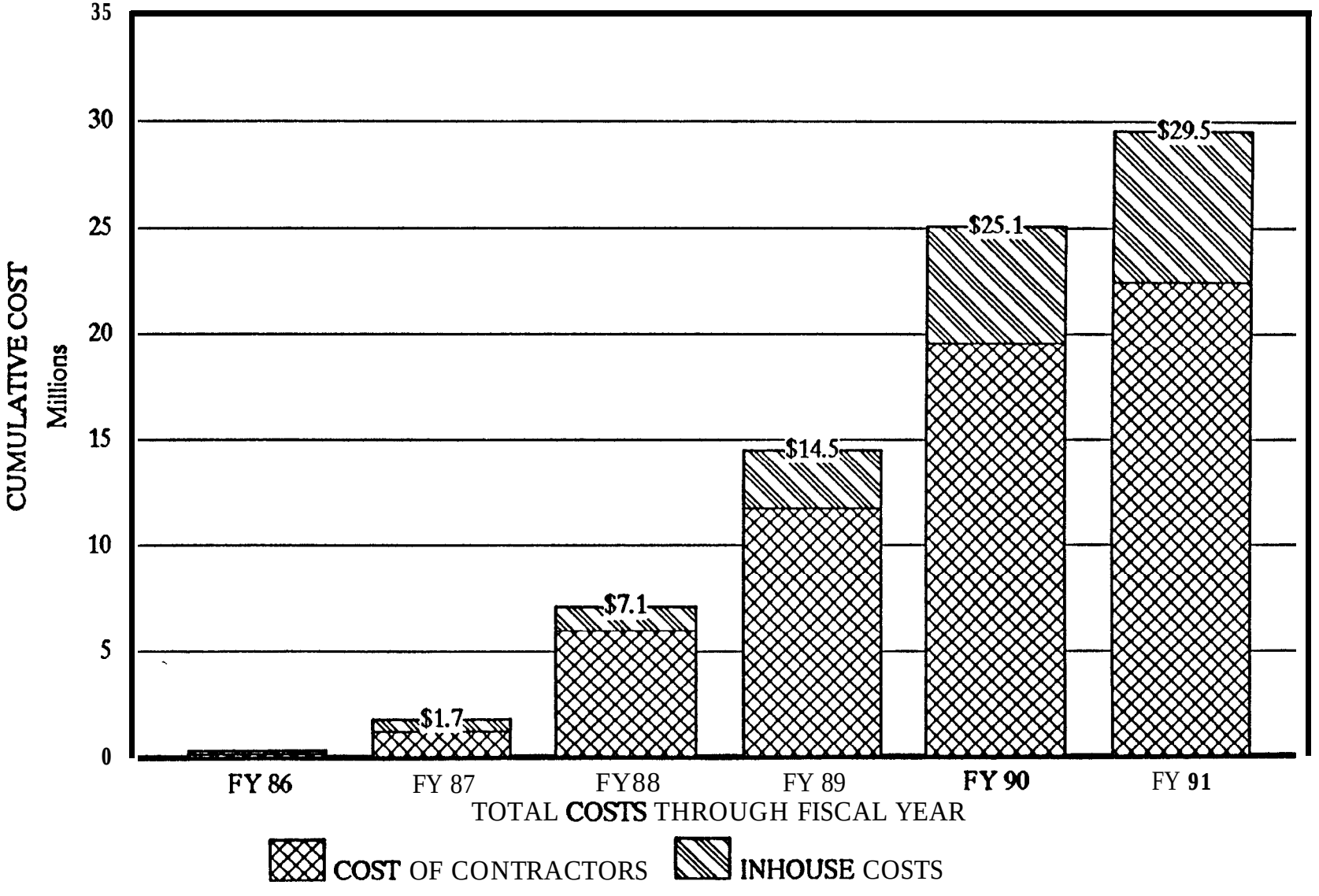
AHCCCS EXPENDITURES FOR PMMIS DESIGN, DEVELOPMENT, AND IMPLEMENTATION BY FISCAL YEAR

	Cost of Contractors	In-house Cost	Total Cost	Cumulative Cost
1986	$154,235	$111,755	$265,990	$265,990
1987	1,006,352	455,565	1,461,917	1,727,907
1988	4,804,610	580,951	5,385,561	7,113,468
1989	5,765,717	1,583,873	7,349,590	14,463,058
1990	7,838,672	2,764,666	10,603,338	25,066,396
1991	2,857,918	1,618,440	4,476,358	29,542,754
All Years	$22,427,504	$7,115,250	$29,542,754	$29,542,754

Source: Claimed computable expenses on HCFA-64 reports.

Figure 7-1

CUMULATIVE COMPUTABLE COSTS FOR PMMIS **DESIGN, DEVELOPMENT, AND IMPLEMENTATION BY FISCAL YEAR**



Source: Claimed computable expenses on HCFA-64 reports

Management Subsystem, and much of LEDS/CATS) are not federally certified for 75% funding, and are not included in these figures.

Comoarison to Other States

A group of 15 states was selected for comparison to AHCCCS PMMIS costs. The states selected included all states meeting the following criteria:

(1) Total medical service costs for federal fiscal year 1991 (FFY 91) were between $500 million and $2 billion - i.e., in the same general size range as Arizona;

(2) The state has an operational MMIS; and

(3) At most a small portion of the state's mechanized system cost are other than MMIS.

The fifteen states meeting this criteria were Alabama, Arkansas, Colorado, Georgia, Kansas, Kentucky, Maine, Maryland, Oklahoma, Oregon, South Carolina, Tennessee, Virginia, Washington, and West Virginia. Four other states, Iowa, Minnesota, Mississippi, and Wisconsin, met the first two criteria but were excluded because they had substantial non-MMIS computer costs, which could mean that a comparison of MMIS costs to other states might not be appropriate for these states.

The states were compared in two ways: MMIS costs per member month; and MMIS costs as a percent of medical service costs. The data for the fifteen states were obtained from the HCFA-64 and the HCFA-2082 reports for FFY 91. This is the most recent time period for which comparison data was available at the time of this analysis. The data for AHCCCS were from the HCFA-64 and AHCCCS eligibility data, for the five quarters ending June 30, 1992. This is the first five quarters of operation of the PMMIS. The comparison time periods are slightly different because the PMMIS did not begin operation until the second quarter of 1991.

Figure 7-2 shows the comparison of operational costs per member month. AHCCCS was $3.81 compared to an average of $2.16 for the 15 states and $2.06 nationwide. (The nationwide figures included non-MMIS costs reported on line 5 of the HCFA-64, because not all states have an approved MMIS. The nationwide figures are therefore the total mechanized system cost per member month.) AHCCCS costs were higher than 14 of the 15 comparison states and substantially higher (at least 30%) than 11 of the 15.

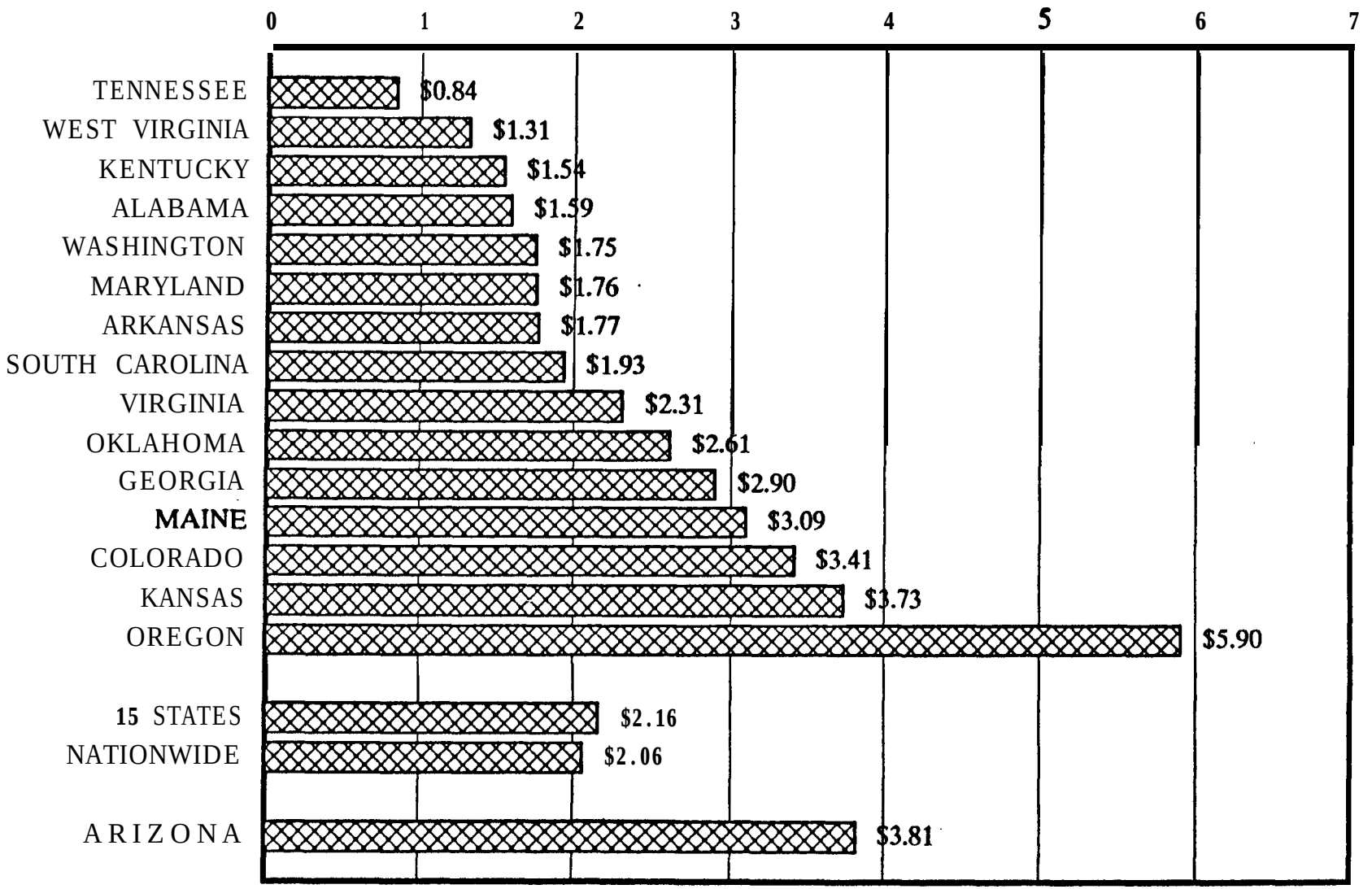
Figure 7-3 shows operational costs as a percent of medical service costs. AHCCCS was 1.68% compared to 0.80% for the 15 states and 0.68% nationwide. AHCCCS was at least 40% higher than 14 of the 15 states. However, AHCCCS is adversely impacted in this comparison by the fact that their medical service costs in relation to eligibility are significantly lower, on average, than the other states.

The state of Oregon might be considered an outlier in the comparisons in Figures 7-2 and 7-3. Oregon officials indicate that a substantial portion of the reported "Operational" MMIS cost during fiscal year 1991 was actually for the development of a new system to support their managed care program. They estimate that 25 to 35 percent of the cost was for this development work. If the Oregon costs were reduced by 35 percent, the resulting 15 state average would be $2.08 per member month and 0.77% of medical service costs. The resulting cost ratios are closer to the nationwide averages.

Comparisons with other states should always be viewed with some caution. All state programs have differences in scope of services, and may have differences in accounting practices for reporting costs. However, it appears from these comparisons that the AHCCCS PMMIS costs are significantly higher than MMIS costs in other states. further, the AHCCCS costs are not burdened by a substantial volume of fee-for-service claims which is the case in the other states. Much of the claims processing cost in AHCCCS is borne by the health plans. Finally, there are some significant PMMIS costs which are not included in the comparison, such as the Case Management Subsystem.

Figure 7-2

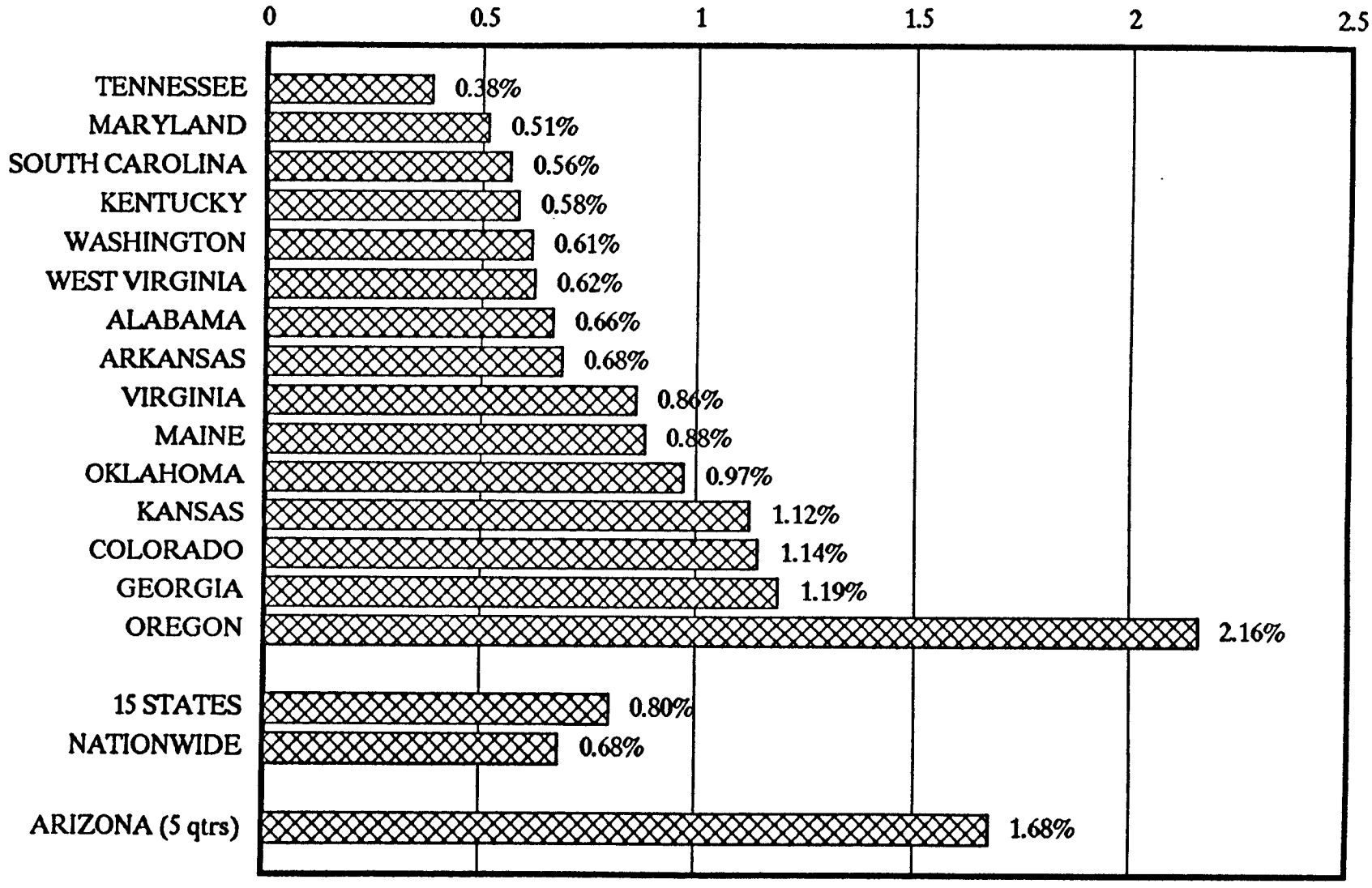
COMPARISON OF MMIS COSTS PER MEMBER MONTH



Source: HCFA-64, Line 4 for states, Lines 4 and 5 for Nationwide, HCFA-2082, AHCCCS Eligibility Data Arizona, 5 quarters ending June 1992, other states: Federal FY 91

Figure 7-3

COMPARISON OF MMIS COSTS AS PERCENT OF MEDICAL PAYMENTS



Source: HCFA-64, Arizona, 5 quarters ending June 1992, other states: Federal FY 91

Comoarison to Prior AHCCCS MMIS Costs

The five quarters of PMMIS operational cost were compared to the last five quarters of MMIS cost, ending March 1991. Again, costs were compared on a cost per member month basis, as well as costs as a percent of medical service costs.

One difficulty in these cost comparisons is that only the fee-for-service portion of the MMIS was claimed for 75% reimbursement prior to implementation of the PMMIS. We have not been able to obtain estimates from AHCCCSA on what portion of the total MMIS costs were claimed. Ideally, a comparison of costs before and after PMMIS should adjust for the non-claimed MMIS costs. On the other hand, as noted above, there were also some significant PMMIS costs that were not claimed at 75%, and these would also be included in an ideal comparison.

A second factor impacting the comparison is the fact that, in the last months of the MMIS, AHCCCSA was reluctant to commit more than minimum resources to maintain and enhance the old system. Therefore, the MMIS costs are probably lower than they would be in an ongoing system.

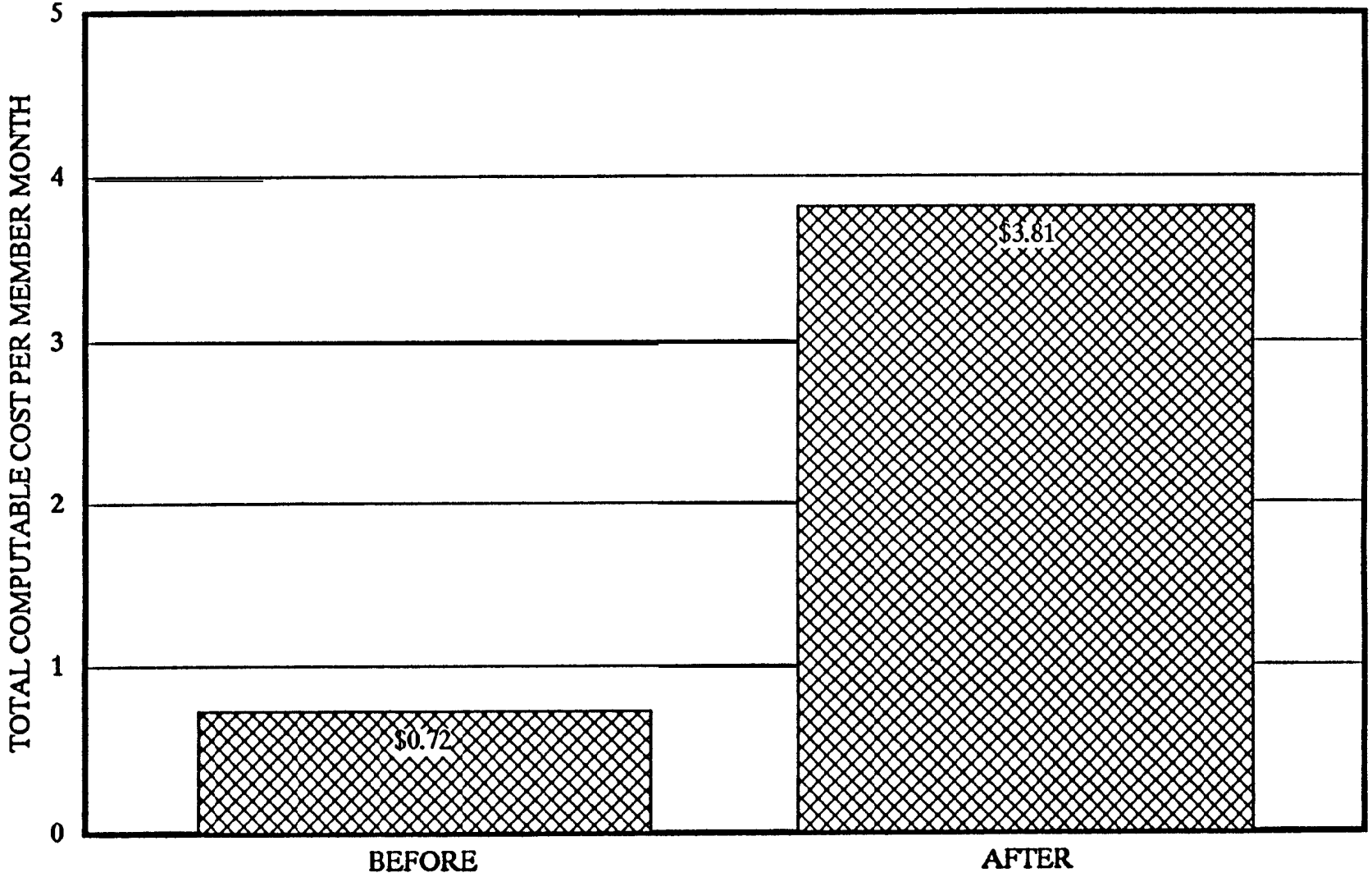
Figure 7-4 shows the comparison of before and after costs per member month. The costs increased approximately five-fold, from $0.72 per member month to $3.81 per member month.

Figure 7-5 shows the comparison of before and after costs as a percent of medical service costs. The costs increased approximately four-fold, from 0.40% to 1.68%. The post-PMMIS costs were probably favorably impacted by the growth in the long-term care program, because that would tend to raise the medical service costs without a proportionate increase in computer system costs.

Prior to implementation of PMMIS, the MMIS costs represented 4.3% of the total computable AHCCCS administrative costs (excluding the costs of PMMIS

Figure 7-4

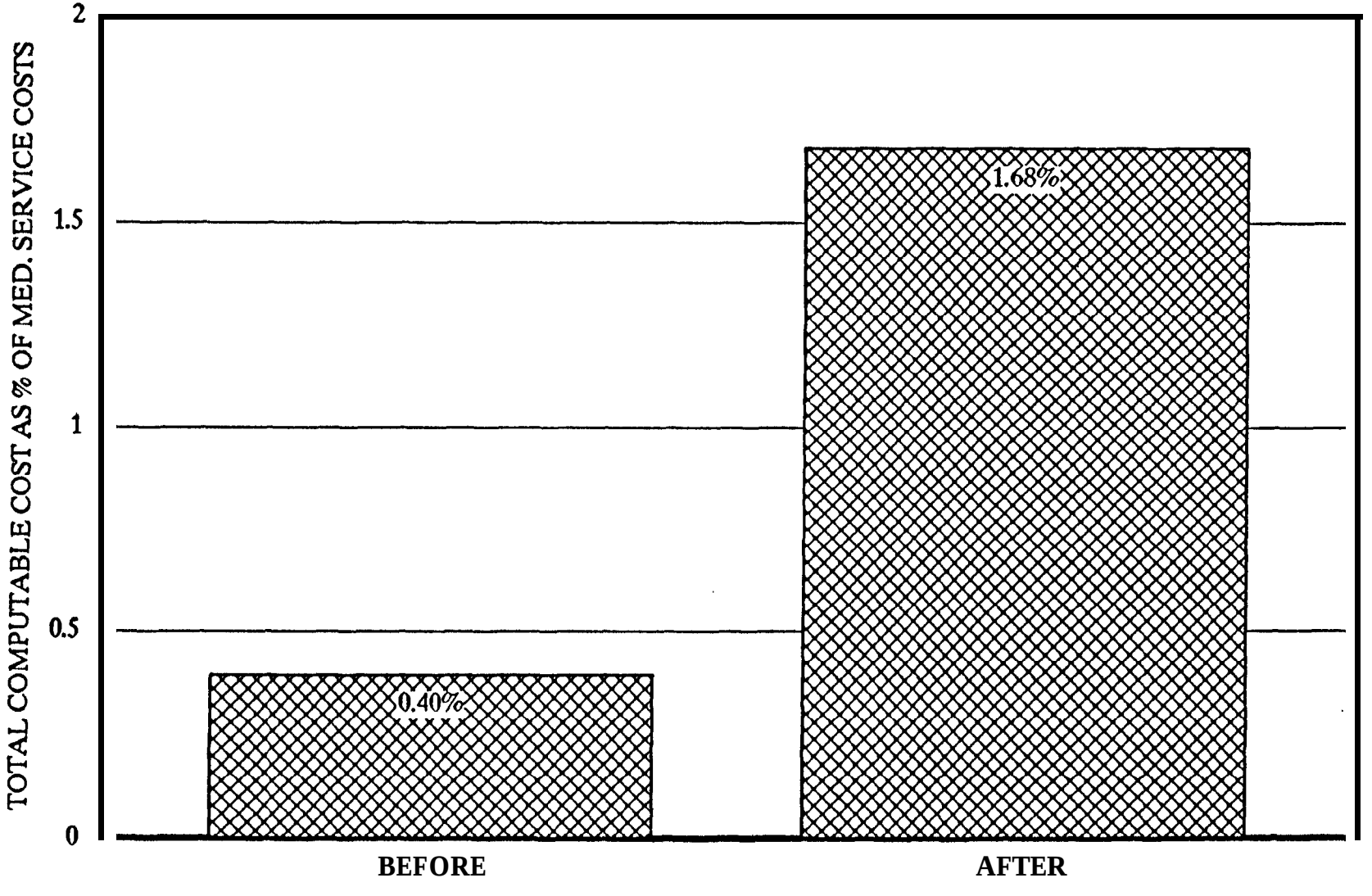
COMPARISON OF BEFORE AND AFTER MMIS AND PMMIS OPERATIONAL COSTS PER MEMBER MONTH



Source: HCFA-64.10 including adjustments. "Before" is five quarters ending March 1991, "After" is five quarters ending June 1992.

Figure 7-5

COMPARISON OF BEFORE AND AFTER MMIS AND PMMIS OPERATIONAL COSTS
SHOWN AS A PERCENT OF MEDICAL ASSISTANCE PAYMENTS



Source: HCFA-64.10 including adjustments. "Before" is five quarters ending March 1991, "After" is five quarters ending June 1992.

development). After implementation, the PMMIS operational costs represented 19.9% of total administrative costs.

From any of the above perspectives, the PMMIS costs are substantially higher than the MMIS costs before implementation of PMMIS. Some of this is due to the fact that part of the MMIS costs were not claimed at 75% and therefore are not included in the comparison. Some could be due to an increase in the scope and complexity of the state's program, as much of the PMMIS "operational" cost involves enhancements to accommodate major program changes. However, even considering these factors, it would appear that a conservative estimate of the PMMIS impact has been to increase costs at least two to three-fold.

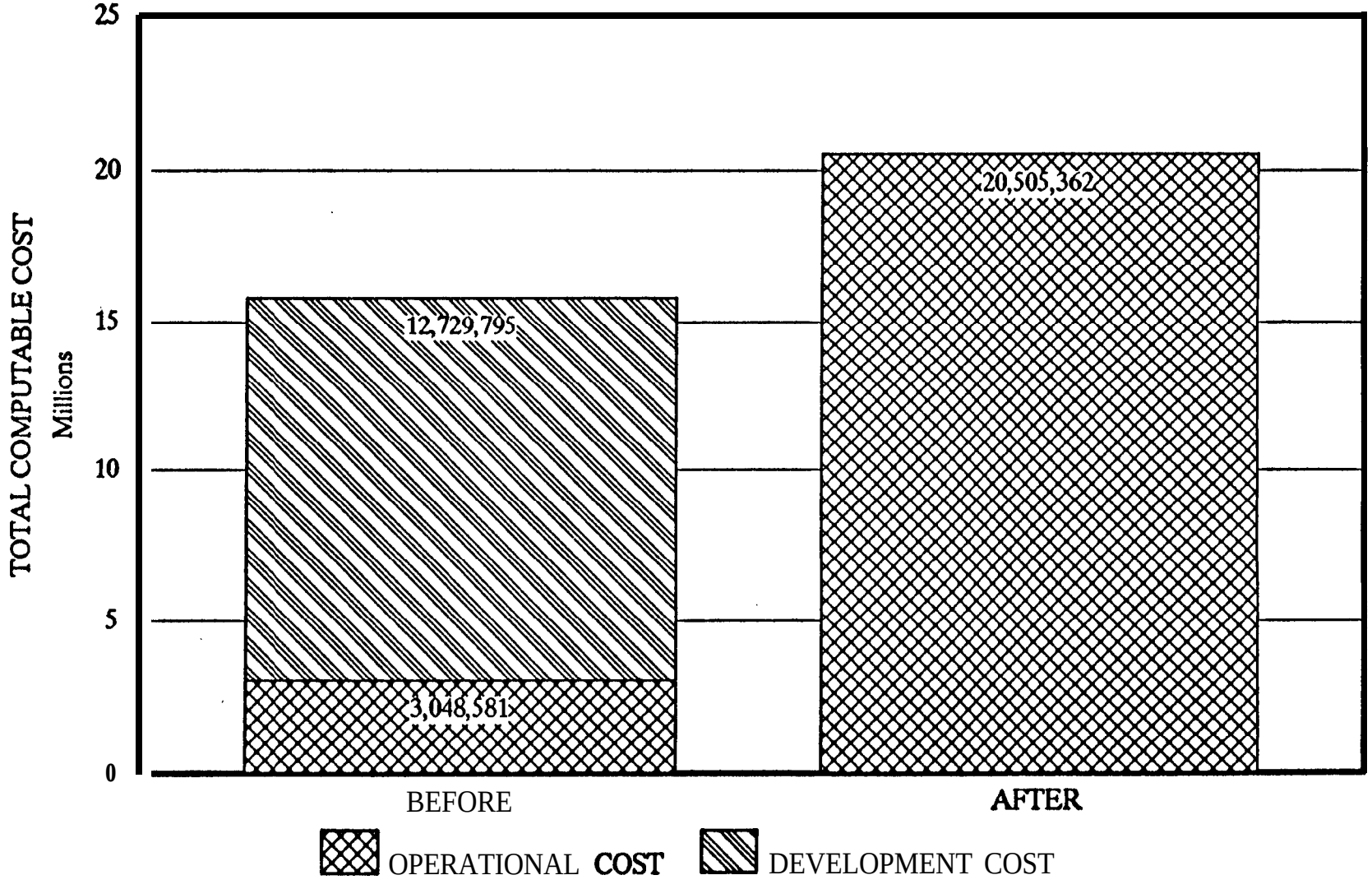
Figure 7-6 puts this increase in the perspective of the total claimed MMIS/PMMIS costs, including both development cost and operational cost. In the five quarters prior to PMMIS implementation, approximately $16 million in costs were claimed for the combined MMIS operation and PMMIS development. For the five quarters after implementation, a total of over $20 million in costs were claimed for PMMIS operation. Thus, once development was completed, AHCCCSA was not able to "save" the major development costs. In effect, the development costs became operational costs as staff and contractors assigned to the development were transferred over to maintain the new system.

Comoonents of PMMIS Ooerational Cost

The principle data source for analyzing the components of PMMIS operational cost was the Summary of AHCCCSA Administration Expenditures, a quarterly spreadsheet detailing all costs claimed on the HCFA-64. We reviewed PMMIS costs for the four quarters ending June 30, 1992 (the quarter ending June 30, 1991 was not included because accounting changes during this period make it difficult to obtain accurate PMMIS operational cost data from this source). For purposes of component analysis, we compared "Gross Computable Costs" (i.e., qualifying PMMIS operational costs before dilution for state-only eligibles).

Figure 7-6

COMPARISON OF MMIS AND PMMIS DEVELOPMENT AND OPERATIONAL COSTS FOR FIVE QUARTERS BEFORE AND AFTER PMMIS IMPLEMENTATION



Source: HCFA-64.10 including adjustments. "Before" is five quarters ending March 1991, "After" is five quarters ending June 1992.

Figure 7-7 shows the major components of PMMIS operational cost during this period. Approximately, 31% of costs were employee-related (salary and benefits), 24% were Professional and Outside Services, 35% were computer charges from the Department of Administration, and 10% were all. other, including depreciation, equipment and supplies, and maintenance and repair of equipment.

Each of these components of operational cost increased substantially after implementation of the PMMIS. Figure 7-8 shows the average quarterly costs comparing the old MMIS to the PMMIS. Employee related costs increased from $433 thousand to $1.5 million. Computer charges increased from $317 thousand to $1.6 million. Professional and Outside Services increased from zero to $1.1 million, and "All Other" increased from zero to SO.5 million.

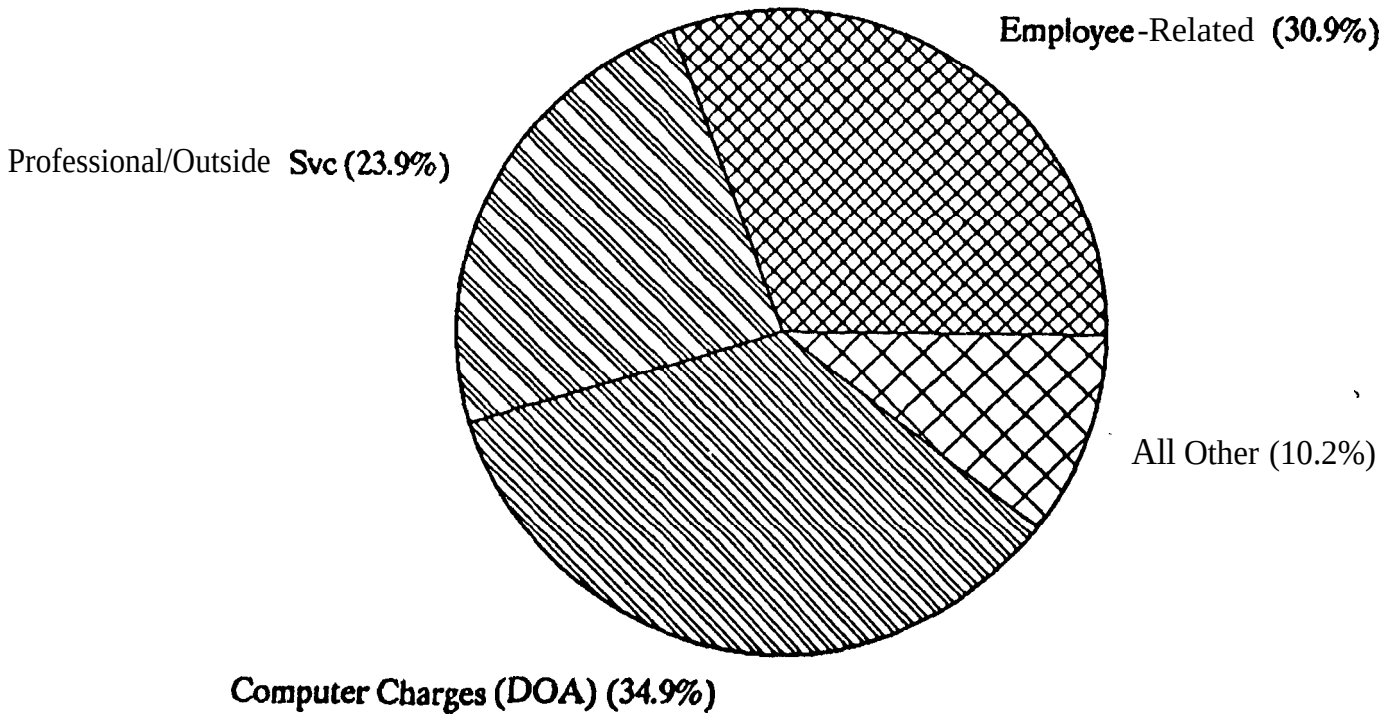
The increases in employee related costs and Professional and Outside Services reflect the fact that much of the PMMIS development staff (in-house and consultants) were retained to maintain the PMMIS. As of December 1992, total PMMIS staff included 99 full-time employee positions plus around 35 consultants, which still represents a substantial portion of the total staff during the development of the PMMIS. AHCCCSA is continuing to attempt to "convert" consultant staff to in-house, but the expectation is that the total staff level is unlikely to be reduced substantially over the next year or two because of the heavy backlog of system maintenance and enhancement requests.

Figure 7-9 shows the quarterly expenditures for Professional and Outside Services, for the five quarters before and after PMMIS implementation. The five quarters before represent contractor cost supporting the PMMIS development, and the five quarters after represent mostly the same contractors supporting the ongoing maintenance of PMMIS. As can be seen in the figure, some progress has been made in reducing the dependence on outside contractors, but the outside cost is still substantial.

The major components of the computer charges (Department of Administration) are batch processing, on-line processing, and disk storage.

Figure 7-7

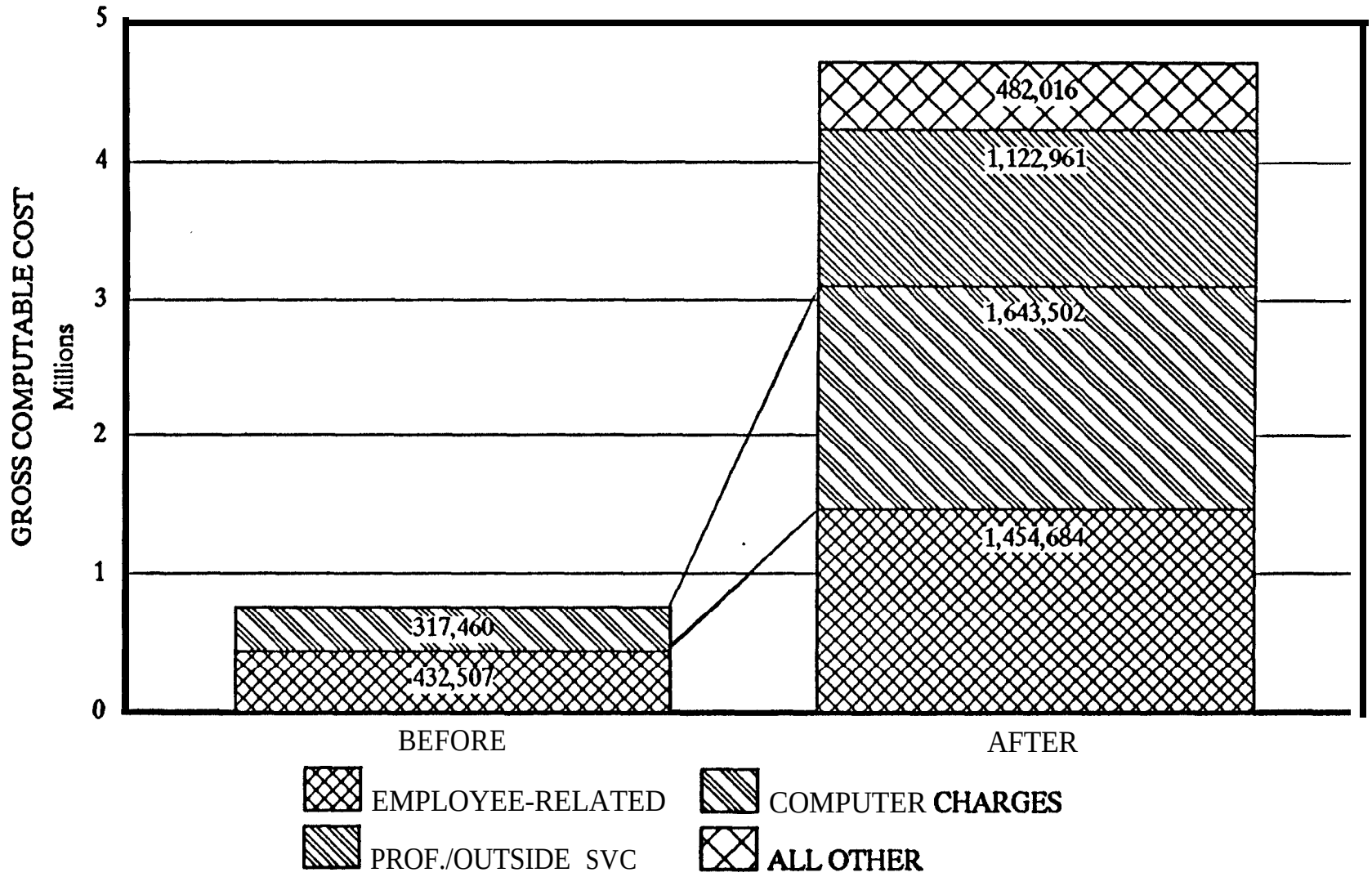
BREAKDOWN OF PMMIS OPERATIONAL COST FOR FOUR QUARTERS ENDING JUNE 30, 1992



Source: Summary of AHCCCSA Administration Expenditures - Gross Computable Costs

Figure 7-8

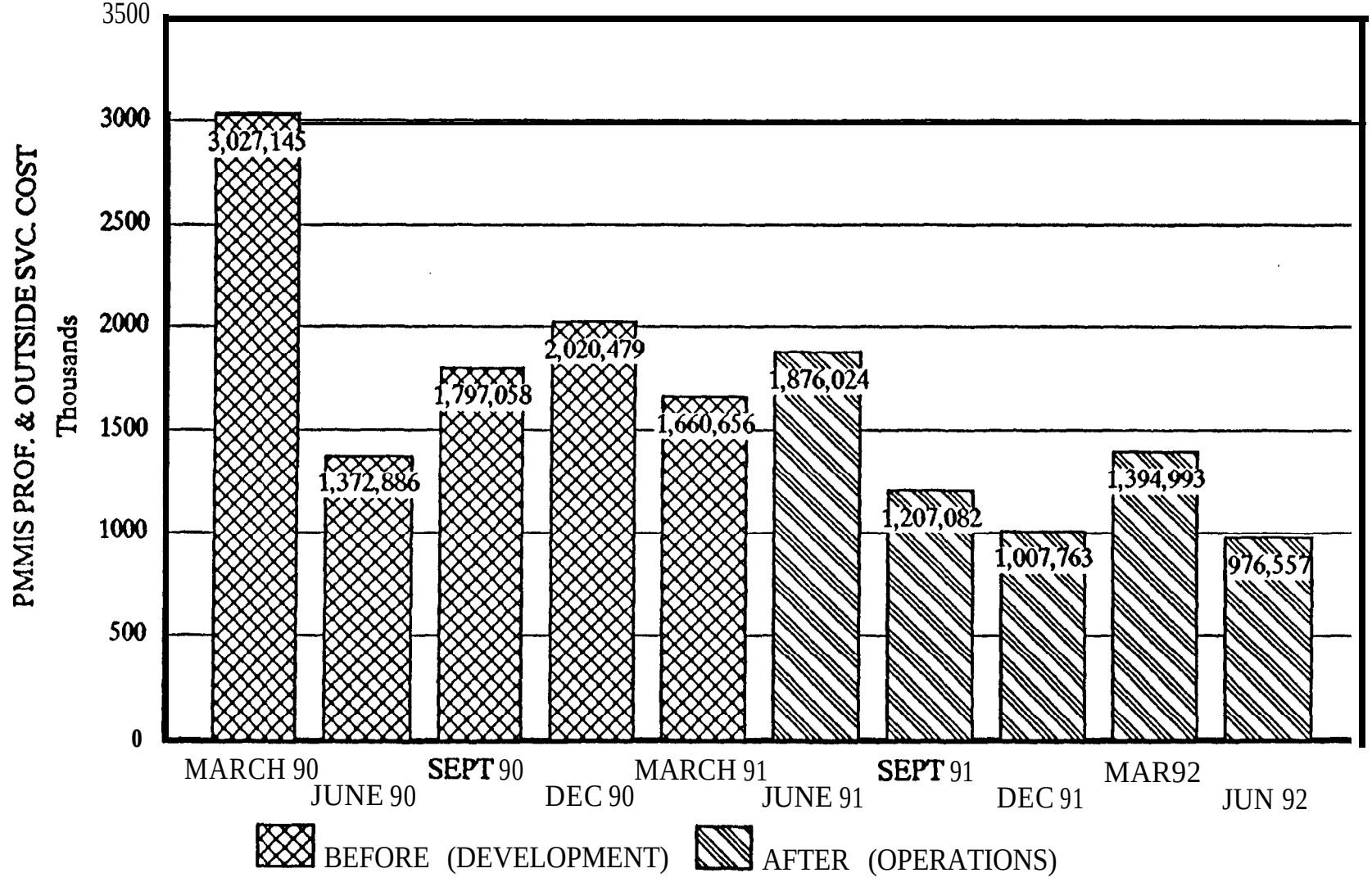
COMPARISON OF AVERAGE QUARTERLY MMIS AND PMMIS OPERATIONAL COST BEFORE AND AFTER PMMIS IMPLEMENTATION



Source: **Summary of AHCCCSA Administration Expenditures - Gross Computable Costs. "Before" is five quarters ending March 1991 and "After" is four quarters ending June 1992.**

Figure 7-9

COMPARISON OF QUARTERLY PROFESSIONAL AND OUTSIDE SERVICES EXPENDITURES FOR FIVE QUARTERS BEFORE AND AFTER PMMIS IMPLEMENTATION



Source: **'Summary of AHCCCSA Administration Expenditures ~ Gross Computable Costs. "Before" is five quarters ending March 1991 and "After" is four quarters ending June 1992.**

An analysis of the Department of Administration data billings indicates that each of these categories has increased under the PMMIS. This can be attributed to several factors. There is more functionality in the new system, such as encounters and claims being on-line. The system stores much more information (e.g., eight times the amount of information on recipient records). Encounters were previously stored on tape, but now are on more expensive disk storage to support on-line processing. There are more users with access to the system; in particular, users at the Department of Economic Security (DES), Department of Health Services (DHS), and the Mental Health Regional Behavioral Health Centers have inquiry capability. Finally, some applications previously run on the System 36 minicomputers are now on the mainframe (e.g., auto assignment, newborn processing, and county eligibility calls).

AHCCCSA is working to make improvements in system performance and to reduce machine cost. Efforts have been made to fine tune the database structure, improve data keys, etc. AHCCCSA officials feel that progress has been made and will continue to be made in this area. For example, the November 1992 month end processing was reduced to 8 hours of machine time, from 17 hours the month prior.

PMMIS Cost-Effectiveness

In the Advance Planning Document (APD) requesting HCFA approval for the development and implementation of a certified Medicaid Management Information System (MMIS), each state must submit a cost-effectiveness analysis detailing the anticipated development and implementation costs, operations costs, and quantifiable benefits expected from the new system. AHCCCSA submitted its original APD for the PMMIS in September 1985 reflecting a total cost for design, development, and implementation of $5 to $6 million. After completion of the General System Design (GSD), AHCCCSA submitted a revised APD in July 1987 which updated the forecasts of costs and benefits in light of the GSD.

The revised APD projected development and implementation costs totalling $18 million, not including the approximately $2 million which had been spent to date on the GSD. The APD anticipated that the PMMIS operations costs would be about the same as the old MMIS costs. The expected quantifiable benefits of the PMMIS totalled $7.6 million per year based on the following estimates:

Savinos Area	Estimated Annual Savinos (000)
Enhance Fee-for-Service Processing	$ 452
Provide Ad Hoc Reporting Capabilities	18
Reduce Production Problems	236
Reduce Use of Contract Programmers	343
Enhance External Inquiry Capabilities	255
Maximize Hospital Discounts	53
Utilize Encounter Data for Negotiation	982
Enhanced TPL Recoveries	115
Enhanced TPL Cost Avoidance	2,000
Avert Health Plan Failure	100
Enhance Utilization Control by Health Plans	1,075
Enforce Inpatient Prior Authorization	705
Identify Medicare Eligibles Earlier	1,224
Total	$ 7,556

These savings estimates amounted to 2.6% of the total AHCCCS program and administrative expenditures in FY 86 through FY 87.

Based on an implementation cost of $18 million, little change in operations cost, and annual savings of 57.6 million, the APD estimated that the new PMMIS would have a payback period of slightly under three years.

In the preceding section of this chapter, we have seen that the PMMIS development and operational costs have significantly exceeded the expectations of the APD. The final development costs, including the cost of the GSD,

amounted to $29.5 million. Several factors led to the increase in development costs, including some major mandated program changes and the addition of the ALTCS program. The factors contributing to the increased development cost are discussed in detail in the First Implementation/Operation Report.

The PMMIS operational cost is conservatively estimated as two to three times higher than the old MMIS cost. Some of the factors explaining the increased operational costs were discussed in the last section.

In this section, we focus on the APO estimates for quantifiable savings, or tangible benefits, of the PMMIS. We discuss each of the above projected areas of savings and evaluate the extent to which the savings appear to have been realized. This is then followed with some overall observations on the cost-effectiveness of the PMMIS.

Analyzing PMMIS tangible benefits has been a difficult task, because there has been no attempt by AHCCCSA to quantify any of the areas where it feels it is achieving a true savings. Therefore, the discussion below focuses on a qualitative evaluation of each savings area, indicating the likelihood that any "significant" savings have in fact been achieved.

Evaluation of Tangible PMMIS Benefits

Enhance Fee-for-Service Processing

APD Projected Savings: $452,000 per year; one percent of fee-for-service payments.

Basis of Savings

Extensive edit and audit capabilities, improved interfaces with external eligibility sources, and expanded patient care histories were anticipated to reduce the amount of duplicate payments and other erroneous payments.

Analysis

The claims edits and audits under the new PMMIS are not more stringent than under the old MMIS. However, users feel that the implementation of the new system has created an environment in which there is more consistency in the application of policy. In the last two or three years of the old system, there was a growing tendency for users to find means to override the system edits in order to expedite the payment of claims. Under the new system, policy limitations and controls on erroneous payments are more strictly enforced. The edits in the new system are also more streamlined and efficient, reducing user frustration and therefore reducing user tendencies to override the system. Finally, the new system has facilities for periodic post-payment checks on erroneous payments and duplicates.

Overall, there does appear to be a likelihood that duplicate and erroneous payments under the new system may be significantly reduced in comparison to the old system, especially in its last years. However, there has been no attempt to quantify or evaluate the savings.

Provide User Ad Hoc Reporting Capabilities

APD Projected Savings: $18,000 per year; 50 programming hours per month @ $30.

Basis of Savings

It was anticipated that under the new PMMIS, users would be able to format and request their own ad hoc reports, rather than submitting SSRs to the MIS department for programmers to develop the report.

Analysis

In fact, SSRs are still used to request ad hoc reports under the PMMIS, and there are currently two programmers devoted to supporting ad hoc reporting (down from four initially), as well as the equivalent of two to three liaison staff members who assist in the specification and interpretation of user requirements.

In many respects, the PMMIS has greatly facilitated the production of ad hoc reports, and this is viewed enthusiastically by users as a major benefit of the PMMIS. Consequently, the amount of ad hoc reporting has increased significantly. However, from a cost standpoint, the resources devoted to ad hoc reporting have probably increased significantly rather than being reduced as originally anticipated.

Reduce Production Problems

APD Projected Savings: $236,000 per year; 655 programmer hours per month @ $30, starting in third year.

Basis of Savings

Because of the outdated structure of the old system as well as its evolution as a patch-work of changes, production problems were frequent, requiring significant resources to run production correctly. It was anticipated that the new PMMIS would reduce these problems and would overcome startup problems by its third year of operation.

Analysis

It is generally felt that the PMMIS has already met its promise of smoother production cycles, with less need for extra resources devoted to fixing production problems. However, overall the new system is much larger and complex and requires significantly more resources to maintain.

Reduce Use of Contract Proarammers

APD Projected Savings: $343,000 per year, based on FY 88 budget for contracted programmers.

Basis of Savinss

The APD anticipated that "the new PMMIS will reduce the need for extensive enhancements and maintenance and thus the need for contracted programmers, assuming the MIS staff is at full complement."

Analysis

Use of contract programmers has exploded under the PMMIS, as has the demand for enhancements and maintenance. As of December, 1992 (21 months after PMMIS implementation), there are still 35 full-time consultants on staff. Consultant costs for the year ended June 30, 1992 exceeded $4 million. The need for consultants has been driven by the backlog of System Service Requests and also by the level of technical expertise required to maintain the new system. AHCCCSA is attempting to reduce the reliance on consultants, by converting consultants to full-time employees. However, the total need for staff resources (employee or consultant) is not expected to be reduced in the next year or so, because of the backlog of requested enhancements and maintenance requirements.

Enhance External Inquiry Cababilities

APD Projected Savings: $255,000 per year, based on reducing staff in communication unit from 30 to 10.

Basis of Savinas

It was anticipated that the new PMMIS would have an automated touch-tone telephone system to handle routine inquiries, e.g., about member eligibility and enrollment status. The communications unit staff would only be needed to handle the more complex inquiries.

Analysis

The touch-tone system was never implemented. However, AHCCCSA implemented an automated verification system in July, 1992 which allows providers to obtain hard-copy or on-screen member information when they enter a member's name or ID number. Providers pay per transaction for this optional service provided by a third party vendor. To date, only a small percentage of verification calls have been handled through this service, although the volume is increasing each month. This system has allowed the communication unit to handle volume growth without adding to staff. If the system is successful in attracting a large percentage of provider inquiries, there could be significant cost savings in the future. To date, any savings would be very modest, as compared to the two-thirds reduction originally projected. Savings should also be offset by the cost to providers of the automated verification service.

Maximize Hospital Discounts

APD Projected Savings: $53,000 per year; 0.15% of fee-for-service hospital charges.

Basis of Savinos

At the time that the APD was published, AHCCCSA was able to pay 97% of hospital claims within 30 days and therefore benefit from the full 15% discount on timely payments. For payments made between 31 and 60 days the discount was 10 percent. The APD anticipated that the PMMIS would achieve the 15% discount on 100% of claims, therefore saving 0.15% (5% times 3%) of hospital claim payments.

Analysis

The PMMIS has the potential to improve the management of the hospital charge discounts. The PMMIS generates an ad hoc report on claims approaching critical time deadlines, so that claims work can be prioritized. It is also possible to pull up on-line information on pending claims by "location" to help manage timely processing.

However, currently significant numbers of hospital claims are still not receiving the full discount for timely payment. It is our judgment that to date there has been little or no savings, but the savings could be achieved if claims processing improves in the future.

Utilize Encounter Data for Nesotiation

APD Projected Savings: $982,000 per year: 0.5% reduction of capitation rates.

Basis of Savinss

It was anticipated that encounter data could be used to determine plans' actual costs, and therefore improve AHCCCSA's position in negotiating rates with the plans.

Analysis

AHCCCSA indicates that the use of encounter data in the setting of capitation rate ranges has not changed with the implementation of PMMIS. Also, it has not been demonstrated that encounter data under PMMIS is more complete or accurate than under the old system.

It is true that the PMMIS on-line encounter research capabilities has enhanced the Administration's ability to manage the encounter process. However, over the years, the main determinant of the success of the process has been the commitment of management and resources to the encounter process by AHCCCS and the plans. When the focus and commitment has been there, the data has improved, and at other times it has deteriorated, The computer system can be very helpful, but it is not the primary factor.

Complete and accurate encounter data could potentially reduce rates by reducing uncertainty and/or by showing utilization to be lower than otherwise expected by the negotiating parties. However, it is also possible that more complete and accurate data, if it shows higher than expected utilization, can increase rates.

Our conclusion is that the PMMIS has not resulted in any savings in the rate negotiation area. We do believe, however, that to the extent the PMMIS can assist in providing more complete and accurate utilization information, this will improve the long-term management of the program, which in turn should lower costs.

Enhanced Third Party Liability Recoveries

APD Projected Savings: $115,000 per year, based on 20% increase in recoveries.

Basis of Savings

The savings apply primarily to recoveries where a third party is found to be liable (e.g., in casualty cases). See "Enhanced TPL Cost Avoidance" for savings attributable to reducing payments because of other insurance.

Under the old system, recovery staff used mostly manual means to research potential cases and to track recoveries. The PMMIS would offer on-line research capabilities and the case management subsystem would facilitate the tracking and management of potential recoveries.

Analysis

The PMMIS did offer a much streamlined process for researching and tracking recoveries. However, AHCCCSA recently decided to contract the TPL recovery function out to a vendor who will not be using the PMMIS capabilities. Savings can therefore not be attributed to the PMMIS.

Enhanced Third Party Liability Cost Avoidance

APD Projected Savings: $2,000,000 per year; 60% increase in cost avoidance.

Basis of Savings

The old system used only limited edits and eligibility data to identify claims with cost avoidance potential (i.e., claims where Medicare or another insurance carrier should be billed before AHCCCS). The PMMIS was anticipated to have enhanced TPL information in the member file. Also, the data would be more complete as a result of automated interfaces with external information sources.

Analysis

The PMMIS member records contain improved detail on other coverages. The old system only included an indicator of other insurance. The new system includes information on type and dates of coverage.

However, the biggest issue for improved cost avoidance is the completeness and accuracy of the data supplied by the eligibility sources, which has traditionally been a problem in AHCCCS as well as in other states' programs. The majority of the expected savings would likely come from the automated data exchanges, and these have not yet been implemented. The TPL recovery vendor will undertake data exchanges as part of its contract, but this is not a result of PMMIS implementation. Once more reliable data on other insurance is obtained, the increased level of detail of such data in the PMMIS will allow better use to be made of that data than would be the case under the old system.

We do not believe that any significant savings can yet be attributed to the PMMIS. Given successful data exchanges, cost avoidance could improve significantly in the future, which could be partially attributable to the improved PMMIS data structure, but mostly to the efforts of the third party vendor.

Avert Health Plan Failure

APD Projected Savings: $100,000 per year, based on the expenses for one plan failure.

Basis of Savings

The APD anticipated that plan oversight would be enhanced through use of more timely encounter data, enhanced reporting capabilities, and plan-to-plan

comparative analysis. Problem trends would be identified earlier giving AHCCCSA time to initiate corrective action to prevent plan failure.

Analysis

Encounter data is not more timely under PMMIS. AHCCCSA still relies primarily on plan-provided (non-encounter) data to monitor the financial health of the plans. Such data includes claims outstanding, as well as utilization trends based on the plans' internal utilization data. Therefore, no savings can be attributed to the PMMIS in this area.

Enhance Utilization Control by Health Plans

APD Projected Savings: $1,075,000 per year; 0.5% of capitation rate budget.

Basis of Savings

The APD anticipated that more accurate and timely utilization data would be provided to the health plans under the PMMIS, resulting in improved utilization control by the plans. This in turn would be reflected in lower plan costs and therefore lower capitation rates.

Analysis

AHCCCSA does not provide any additional utilization data to the plans under PMMIS. It does not appear that any savings have been achieved in this area.

We believe that future savings could be significant if AHCCCSA were to make a concerted effort to provide the plans with timely and useful

utilization data from the PMMJS. Several of the plans indicate a desire to receive comparative utilization data showing their utilization versus other plans. This would be a useful tool to support the plans' utilization control efforts. AHCCCSA could also provide the plans access to provider and recipient utilization profiles from the UR/QA subsystem. Such profiles can highlight exceptions to norms in services provided, focus attention on provider practices, monitor potentially overutilized services or procedures, and rank providers and members by their utilization rates. These types of utilization profiles offer a level of sophistication that may not be available to the plans using their own internal systems. They also offer the capability to include data from other plans.

Some plans indicate that for utilization control purposes, more timely data is available from their own systems. However, with proper management and control of the encounter data process, and perhaps with proper consideration of lag patterns in encounter submissions, it should be possible to provide reliable utilization data from the PMMIS in a sufficiently timely manner to be useful to the plans.

Enforce Inpatient Prior Authorization

APD Projected Savings: $705,000 per year; 2% of inpatient claims costs.

Basis of Savinas

It was anticipated that prior authorization controls would be improved under PMMIS, eliminating the payment of claims which were paid under the old system without authorization.

Analysis

The old MMIS kept track of the prior authorization number only, not the details of the authorization such as service and dollar limits. If a claim had a prior authorization number, it would be paid. Services were easily bypassed, and the system did not update the prior authorization records to indicate the amount of remaining services authorized. Additionally, the prior authorization file was sometimes changed retroactively to force payments. The PMMIS does have enhanced controls and improved information, including service and dollar limits, and amount remaining.

It is likely that significant savings can be attributed to the PMMIS prior authorization capabilities. However, there is no quantitative estimate of the amount of savings.

Identify Medicare Eligibles Earlier

APD Projected Savings: $1,224,000 per year.

Basis of Savings

It was expected that more timely buy-in of Medicare eligibles would save $120 in capitation rate differential for an average of 2.3 months for 370 new Medicare eligibles per month.

Analysis

There is mixed opinion as to whether the new system is more timely in the processing of Medicare buy-in additions and terminations. Several AHCCCS users indicated they felt the PMMIS has improved the timeliness, while there is also an opinion that major progress had been made in the last couple of years of the old system.

In any event, it is difficult to evaluate the savings impact of more timely processing. The result of more timely termination of eligibles would be a definite savings, because such overpaid premiums could not be recouped. In the case of Part 6, there is no differential in capitation rate; more timely buy-in thus would result in an increase in cost to AHCCCS (the cost of the premium) which would not be reduced by a capitation differential. There would be a net savings, however, to the health plans.

In the case of Part A [Qualified Medicare Beneficiary (QMB) only] there is a difference in capitation rate. However, the savings in capitation would have to be offset by the amount of the buy-in premium, which was overlooked in the APD savings projection.

In summary, from AHCCCS' perspective, there may be some increased costs arising from more timely Part B buy-in, and possible savings from more timely Part A buy-in. The level of savings and costs have not been quantified.

Reduce Duplicate Capitation Payments

APD Projected Savings: Not addressed in APD.

Basis of Savings

Improved edit and reconciliation processes in the PMMIS should reduce the number of duplicate membership records and therefore produce savings in duplicate capitation payments.

Analysis

Most AHCCCS users believe that definite savings have been achieved in this area. The PMMIS is said to have more sophisticated logic to detect potential duplicates. Additionally, on-line research tools allow for timely

resolution of potential duplicates, and it is easier to implement corrections in a timely manner once duplicates have been determined.

Savings in this area could potentially be very significant. The PMMIS screens out several thousand potential duplicate members each month, resulting in annualized cost avoidance of about $10 million. However, the old MMIS also had edits to prevent duplicate capitation, and the savings attributable to the PMMIS would be the difference in cost avoidance, comparing the old system to the new. This difference has not been quantified.

More Effective Fraud & Abuse Effort

APD Projected Savings: Not addresses in APD.

Basis of Savings

With more reliable claims data being provided to the investigation unit, that unit can be more productive in pursuing cases and more effective in achieving favorable outcomes.

Analysis

The director of the investigation unit feels that the data from the PMMIS is "100% better" than from the old system. As the unit is "swamped" with cases, having more readily available and reliable data allows them to handle more of the cases and be more effective in developing the cases. To the extent that this results in more successful case outcomes, and the extent that an effective unit deters fraud and abuse in the program, (indirect) savings can be attributed to the PMMIS. Such savings have not been estimated.

More Effective Utilization Review Effort

APD Projected Savings: Not addressed in APD.

Basis of Savinas

More streamlined, less cumbersome utilization reporting should facilitate more effective utilization control, with resulting savings in fee-for-service payments.

Analvsis

The new utilization reporting capabilities are viewed as being much better than the old. The old relied on massive quarterly runs with no access to data in the interim. The new system is structured to allow smaller, more frequent, more focused runs. Requests can be easily structured with results obtained within a couple of days. The new system also gives the UR staff the capability to do on-line research, e.g., for a particular provider. In summary, the new analysis environment is much more interactive and timely, supporting much more effective analysis and research.

AHCCCSA staff provided an anecdotal example of how the utilization reports result in program savings. It was suspected that Ferritin (lead level) tests were being performed frequently and unnecessarily as an add-on to other procedures. A utilization run summarized all Ferritin claims and produced provider profiles showing the most frequent diagnoses associated with this procedure. Cases of inappropriate utilization were identified and dollars recovered. It would have been very difficult or impossible to obtain a similar focused report in the old system.

AHCCCSA does not currently have a strong staff capability to make good use of the utilization reporting function. There may be potential for

significant future savings in this area if an effective UR program using utilization profile data is developed.

Summary of Cost-Effectiveness

Figure 7-10 summarizes the assessment of PMMIS tangible benefits. Of the thirteen areas of savings projected in the APD, we believe there are only two areas, fee-for-service processing and prior authorization, where the actual savings may have reached significant levels. In two other areas, enhanced external inquiry capabilities and earlier identification of Medicare eligibles, savings have probably been achieved but at a much lower level than projected. In three additional areas not mentioned in the APD, there is a likelihood of savings, the most significant being the reduction of duplicate capitation.

A traditional assessment of the PMMIS costs and benefits in relation to those originally promised would probably give failing grades to the system. The development and operations costs have been significantly more than expected, and many of the expected tangible benefits have not materialized as of this point in time.

However, the true cost-effectiveness of the system may not be determined entirely by the tangible costs and benefits. The system is clearly successful in providing substantial day-to-day support for the operation of the AHCCCS program. The system may well be the most critical element of the administrative infrastructure which allows the program to operate. The users believe the PMMIS is indispensable to their jobs and they are very enthusiastic about the system.

One of the greatest intangible benefits of the PMMIS is the ready access it provides AHCCCSA staff to information about any aspect of the program. With a program the size of AHCCCS, a supportive information system often leads to improved policy decision-making with major financial impacts. One particular example was cited by staff from the Office of the Medical Director.

Figure 7-10

SUMMARY OF PMMIS QUANTIFIABLE SAVINGS

	4 PD SAVINGS STIMATE ($000	COMMENT
AREAS WHERE SOME SAVINGS HAVE LIKELY BEEN ACHIEVED		
Enhance Fee-for-service Processing	452	Significant Savings Likely.
Enforce Inpatient Prior Authorization	705	Significant Savings Likely
AREAS WITH REDUCED SAVINGS LIKELY		
Enhance External Inquiry Capabilities	255	Much reduced level of sevings; could increase
identify Medicare Eligibles Earlier	1,224	Much reduced level of savings
ADDITIONAL SAVINGS AREAS NOT IDENTIFIED IN APD		
Reduce Duplicate Capitetion Payments	N. A.	Significant Savings Likely
More Effective Fraud and Abuse Effort	N. A.	Probably Some Savings
More Effective Utilization Review Effort	N. A.	Significant Future Potentiel
AREAS WHERE APD SAVINGS NOT REALIZED		
Provide User Ad Hoc Reporting Capability	18	Significant Benefit to User, but Costs Probably Higher
Reduce Production Problems	238	May be Savings, but More than Offset by Higher Maintenance Cost
Reduce Use of Contract Programmers	343	Cost Much Higher
Maximize Hospital Discounts	63	Future Potential
Utilize Encounter Data for Negotiation	982	No Change in Data for Negotiation
Enhanced TPL Recoveries	115	Function Contracted out to Vendor
Enhanced TPL Cost Avoidance	2,000	May be Significant in Future but PMMIS not the Key Factor
Avert Health Plan Failure	100	No Significant Impact on Plan Monitoring
Enhance Utilization Control by Health Plans	1,076	No Data Provided to Plans for Utilization Control

Transportation for dialysis patients is a high cost item. In response to a legislative inquiry concerning the frequency and cost of transportation provided, an ad hoc report provided the information on a very timely basis. As a consequence of the scrutiny of these services and costs, AHCCCSA reconsidered the reimbursement rates for such services, and reduced them dramatically. Staff feel that the rate change resulted in significant annual financial savings. It could be argued that, given sufficient priority and resources, such information could be obtained from any system, including the old MMIS. Nevertheless, the relational database structure of the PMMIS is designed to make such queries easy to fulfill in a timely manner with minimal need for special programming efforts. More effective management and better decision-making is a likely consequence.

The operational cost of the PMMIS, as a percent of medical service costs, is on the order of one point higher than the costs of the old system. The development and implementation cost of $29.5 million represents around two percent of expected annual medical service costs. Consequently if the PMMIS can generate program savings on the order of two percent of medical costs, then the system can pay for its increased operating costs as well as pay back the development cost over a small number of years. The original savings projected in the APD amounted to 2.8% of medical service costs. While many of the specific areas of projected savings have not been realized, there certainly is the potential for this level of savings, especially when considering the potential dollar impact of the "intangible" benefit of improved program management and decision-making.

Policy Implications

The PMMIS development effort was an extremely ambitious undertaking which produced the first-ever comprehensive MIS to support a prepaid Medicaid program. The system was also the first-ever MMIS development using the latest relational database technology. Both of these factors undoubtedly contributed to the unexpectedly high development cost and lengthy development timeframe. At the same time, the resulting installed system can now be considered an

invaluable model both as a prepaid MIS and as a database system. In the future, states can learn from the PMMIS development and operational experience, both in terms of strengths and weaknesses, in designing their own development approaches.

Our conclusions regarding the development, implementation, and operation of the PMMIS are summarized in the "PMMIS Report Card" shown in Figure 7-11. The development cost of $29.5 million and the development time of five years were considerably greater than originally anticipated. As noted above, the unique prepaid program requirements and the ground-breaking relational database implementation likely contributed to this experience. With regard to the latter, personnel involved in managing the development and implementation of the PMMIS believe that the specific choice of the database software by the Arizona Department of Administration adversely impacted the development time and cost. The software selected, namely the IDEAL/Datacom database management system and fourth generation software development language, had been installed in relatively few places, and there was a significant shortage of technical personnel qualified to support the development using this package. Further, the product lacked the support of a large company like IBM.

Several other factors impacted the development time and cost. The implementation of the ALTCS program in the midst of the PMMIS development effort led to significant changes in the design requirements and also diverted badly needed resources and management attention from the system development. The introduction of the QMB eligibility group added further delays and costs.

Of key importance was the inability of the contract procurement process to attract more than two qualified bidders. Additional bidders might have brought badly needed Medicaid experience to the development process. Undoubtedly, potential bidders were wary of the risks associated with this project, being a fixed price effort involving non-traditional functional requirements and involving new database technology. The state's decision to contract out for the development only, and not the operation, also meant that a potential bidder could not hope to recoup any costs over a number of years of.operation.

The major focus of this chapter has been on the cost-effectiveness of the PMMIS. As summarized in Figure 7-11, the annualized operational costs of $16.4 million are significantly more than expected, significantly more than the old MMIS, and significantly higher than the MMIS costs in comparable states (expressed either as cost per member month or cost per medical assistance dollar). Bottom line, the PMMIS was very expensive to develop and it is a very expensive system to operate and maintain. Further, many of the anticipated financial, or tangible, benefits have not been realized, and none have been quantified. Given a strict quantitative analysis, one must conclude that the system has not yet shown itself to be cost-effective. However, as pointed out earlier in the chapter, a broader view of cost-effectiveness must take into account the very significant "intangible" benefits of the PMMIS, including its role as the key infrastructure supporting the day to day operation of AHCCCS, the ready access it provides to critical program information, and its positive perception by AHCCCSA users, who increasingly view the system as being indispensable to their effectiveness in their jobs. Taking this broader perspective, the system may well be cost-effective, although it is not possible to arrive at a definite conclusion at this stage. Perhaps as AHCCCSA gains further experience with the new system, it will be able to provide more specific quantification of its benefits.

Figure 7-11 also summarizes expected future trends in PMMIS costs and benefits. Operational costs are likely to fall somewhat, as the system progresses beyond the startup period, as the processing operations are fine-tuned, and as progress is made in converting outside contractor staff to in-house staff. With proper management, the system's tangible benefits should also increase over time, especially in areas such as utilization review and TPL cost avoidance. AHCCCSA user satisfaction will increase further as the system continues to be enhanced, and health plan benefits will increase if AHCCCSA begins to provide information such as comparative utilization trends.

The experience of AHCCCSA in developing, implementing, and operating the PMMIS underscores the need for any state embarking on a similar effort to be realistic about the projected costs and benefits of the system. Development costs and timeframes are very often greater than expected, operating costs

Figure 7-11

PMMIS REPORT CARD

PMMIS DEVELOPMENT/IMPLEMENTATION		
Development/Implementation Time	5 years	Signiticantly longer than expected
Development/Implementation Cost	$29.5 million (1)	Significantly higher than expected
PMMIS OPERATIONAL COSTS AND BENEFITS		
Operational Cost - Annualized	$16.4 million (2)	Significantly more than expected, more than old system, more than other states
Financial Benefits	Unquantifii	Many expected benefit8 not realized
Intangible Benefits	Unquantified	Very significant: key AHCCCS infrastructure; user access to information
AHCCCS User Satisfaction		Very positive
Health Plan Perception of PMMIS		Very positive, especially Recipient Subsystem
FUTURE COSTS AND BENEFITS		
Operational Cost		Should be reduced
Financial Benefits		Should Increase
AHCCCS User Satisfaction		More favorable, as system is further enhanced
Health Plan Perception of PMMIS		More favorabb, if more information provided to plans

Notes:
(1) Amount claimed as eligible for 90% federal funding.
(2) Annualized cost based on amount claimed for 75% funding in first five quarters of operation.

higher, and actual tangible benefits lower than expected. These factors need to be considered appropriately in the planning and design of a new system.

While the PMMIS may well be cost-effective in a broad sense, there remains the question of whether the same, or most of the same, benefits could have been achieved for a lower development cost, and/or a lower operational cost. To a great extent, the cost of the PMMIS was driven by some critical design decisions (relational database, on-line encounters, increased functionality, more data on recipients, etc.). The impact of design choice on cost in turn raises an important question which will be increasingly critical as states reach a point where they must replace their current generation MMIS systems. The implementation of the relational database technology has undoubtedly played a major role in the ability of the PMMIS to serve internal user needs, especially in terms of providing ready access to program information and providing flexibility to accommodate program changes. However, one must also wonder whether the new technology is a prime driver of the PMMIS costs which significantly exceed those of other states. If so, then states will need to address the question of whether a step up in MMIS cost is a price they are willing to pay for what may be a more effective MMIS using the latest technology.

The PMMIS experience also raises a question regarding the contracting for MMIS development and operation. Had AHCCCSA decided to contract for at least some period of operation as well as development of the new system, it may have attracted more experienced bidders who would also have had an incentive to design as much operational efficiency as possible into the system. This might have reduced development cost as well as ongoing operational and maintenance cost. Clearly, the contracting decision can have far-reaching implications, well beyond the initial development.

Finally, the PMMIS might be viewed as a model of the role of information in the design of future systems. The PMMIS provides a number of management information reports which users find to be reliable and useful. However, users are much more enthusiastic about the PMMIS' ability to respond to unanticipated information needs, as in ad hoc reports. The system development

life cycle is now so long that fixed management reports may not quite fit the needs of the actual users when the system is finally implemented. Users' needs change over time, and it is impossible at design time to anticipate precisely what they will be at the time the system finally becomes operational. This suggests that less effort should be put into developing specifications for specific system outputs or reports, while more effort should be put into defining the data and their relationships, so that future access to information can be highly flexible. This is precisely the approach taken in the development of a relational database system, and undoubtedly accounts for the flexibility of the PMMIS to serve users' information needs. AHCCCSA users are uniformly enthusiastic about the PMMIS' capability to provide easy and timely access to needed information, such as in ad hoc reporting. Based on the PMMIS experience, future systems should perhaps place increased emphasis on providing such access, with perhaps somewhat less emphasis on traditional MMIS concerns of transaction processing, batch production runs, and fixed production management reports.

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2. In the CSDP and RFP, AHCCCSA defined four types of offerors: 1) staff — a health plan that delivers services through a group practice established to provide health services to health plan members; physicians are salaried; 2) group — a health plan that contracts with a group practice to provide health services; the group is usually compensated on a capitation basis; 3) IPA - a health plan that contracts with an association of physicians from various settings (some solo practitioners, some groups) to provide health services; and 4) network — a health plan that contracts with two or more group practices to provide health services. AHCCCSA also listed seven types of entities from which to choose, including: sole proprietorship, partnership, corporation, governmental, for-profit, not-for-profit, and other.

3. AHCCCSA developed rate ranges across counties and patient class on the basis of the AHCCCS fee-for-service program rates and other adjusting factors. It also sets a floor (the actual expense per day incurred by the lowest expense certified facility in the county in 1988 inflated to current dollars) and a ceiling (the limit used by Medicare to determine Medicare reimbursement) for the evaluation of individual facility rates.

4. For VHS, this information is based on evaluations of data from Years 8 and 9 and meetings held with HMA staff prior to the split with VHS. Although we have subsequently spoken with staff at VHS, it is too soon to adequately assess VHS' new internal system. HMA did, however, transfer complete historical information to VHS at the termination of their affiliation.

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7. Letter from Brian Lensch, Long-Term Care Program Administrator, DES to Michael Veit, Contracts and Purchasing Administrator, AHCCCS, dated May 1, 1992.

8. According to a DES staff member, the major difference related to pended encounters. We were unable to obtain more detailed information at this time.

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Appendix A
DEFINITION OF AHCCCS PROGRAM YEARS

Appendix A

DEFINITION OF AHCCCS PROGRAM YEARS

Fiscal Year	Fiscal Year Definition	AHCCCS Year	ALTCS Year
FY 1989	Oct. 1988 - Sept. 1989	Year 7	Year 1
FY 1990	Oct. 1989 - Sept. 1990	Year 8	Year 2
FY 1991	Oct. 1990 - Sept. 1991	Year 9	Year 3
FY 1992	Oct. 1991 - Sept. 1992	Year 10	Year 4
FY 1993	Oct. 1992 - Sept. 1993	Year 11	Year 5
FY 1994	Oct. 1993 - Sept. 1994	Year 12	Year 6

Appendix B

DESCRIPTIONS OF LONG-TERM CARE SETTINGS VISITED BY THE PROJECT TEAM IN OCTOBER 1992 AND JANUARY 1993

Introduction

This appendix describes the long-term care facilities visited by the project team in October 1992 and January 1993.

Arizona Trainina Program at Coolidae

The average age of clients at Coolidge is in the early-30s, although ages range from late teens to the early 60s: Coolidge has 10 cottages, six of which are Title XIX certified. Two of the cottages are for those clients with multiple handicaps who need assistance'with medications, toileting, and mobility. All of the clients attend some kind of day training program. Coolidge employs 450 people; 350-375 are involved in direct care.

Windsor ICF/MR

Most of the clients who reside at Windsor, an ICF/MR in Phoenix, came from the Arizona Training Program in Phoenix which closed in 1988. The parents chose where the clients would be placed following the closure. The clients will not move again unless the parents agree. Windsor serves a severely dependent population. Many clients have medical needs such as tracheostomy suctioning and gastrointestinal tube feeding, in addition to requiring assistance in ADLs. All but one of the clients is wheelchair bound. The average age of clients is between 20 and 25.

Windsor employs 25 staff members and has a ratio of 1 staff member to 4 clients. When they are at full-strength, the ratio is 1 to 3. During the day, the clients attend day training, go on excursions, or receive therapy in an adjacent building.

Hacienda de los Angeles

The ICF/MR facility with the most client turnover is Hacienda de los Angeles. This facility serves medically-involved children and has a relationship with the Phoenix hospitals. Hacienda is certified for 60 ICF/MR beds and has 20 to 30 filled at any one time, mostly with Title XIX clients.